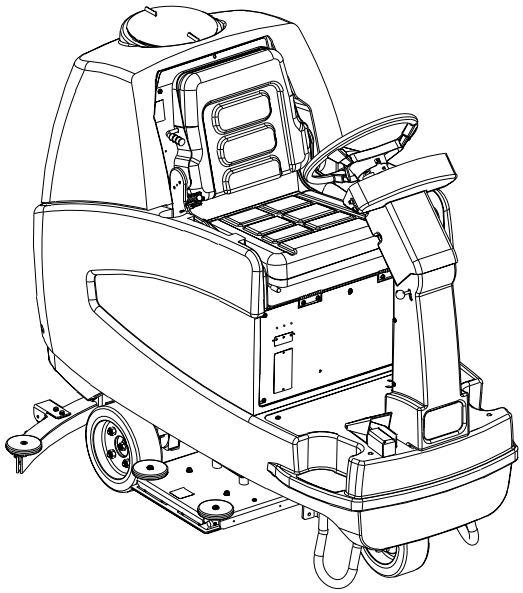
Clarke®

FOCUS

Rider Scrubber

Rotary, Cylindrical and *BOOST*™
(Manual Steering)



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Operator's Manual
Manuel d'utilisation
Libro de Instrucciones

U.S. Patent No. 6,105,192; No. 6,493,896; No. 6,557,207; No. 7,041,029 and Patents Pending
Canada Patent No. 2,353,279 (Deluxe Machines)

READ THIS BOOK
LEA ESTE MANUAL
LISEZ CE MANUEL

EN English (2 - 29)
ES Español (30 - 57)
FR Français (58 - 85)

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your Clarke machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read this manual, have it explained fully before attempting to operate this machine.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: Clarke®, 2100 Highway 265, Springdale, Arkansas 72764.

Form No. 71171A 8/06 Clarke® Printed in the U.S.A.

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OPERATOR SAFETY INSTRUCTIONS

DANGER: **Failure to read and observe all DANGER statements could result in severe bodily injury or death. Read and observe all DANGER statements found in your Owner's Manual and on your machine.**

WARNING: **Failure to read and observe all WARNING statements could result in injury to you or to other personnel; property damage could occur as well. Read and observe all WARNING statements found in your Owner's Manual and on your machine.**

CAUTION: **Failure to read and observe all CAUTION statements could result in damage to the machine or to other property. Read and observe all CAUTION statements found in our Owner's Manual and on your machine.**

DANGER: Failure to read the Operator's Manual prior to operating or attempting any service or maintenance procedure to your Clarke machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.

DANGER: Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine unless it is completely assembled. Inspect the machine carefully before operation. Operate only when lids, doors and access panels are securely closed.

DANGER: Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners, or other flammable materials. This machine is not suitable for picking up hazardous dust or flammable materials. Use only commercially available floor cleaning waxes intended for machine operation. **DO NOT** put gasoline, combustible or flammable materials in the solution or recovery tank.

DANGER: Lead acid batteries generate gases which can cause an explosion. Keep sparks and flames away from batteries. Do not smoke around the machine. Charge the batteries only in an area with good ventilation.

DANGER: Working with batteries can be dangerous! Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tools or other metal objects across the battery terminals, or the tops of the batteries.

DANGER: Using the charger with a damaged power cord could result in an electrocution. Do not use the charger if the power cord is damaged.

WARNING: Do not turn the machine on a ramp. Do not use on surfaces having a gradient exceeding that marked on the appliance.

WARNING: Machines can topple over and cause injury or damage if guided over the edges of stairs or loading docks. Stop and leave this machine only on a level surface. When you stop the machine, put all switches into their "OFF" position. Turn the key switch "OFF" and remove the key.

WARNING: Skidding may occur when traveling at high speeds and attempting sharp turns, especially on wet surfaces.

WARNING: Do not move machine with forklift. Damage could occur to machine.

WARNING: Maintenance and repairs performed by unauthorized personnel could result in damage or injury. Maintenance and repairs must be performed by authorized Clarke personnel only.

WARNING: Any alterations or modifications of this machine could result in damage to the machine or injury to the operator or other bystanders. Alterations or modifications not authorized by the manufacturer voids any and all warranties and liabilities.

WARNING: Electrical components of this machine can "short-out" if exposed to water or moisture. Keep the electrical components of the machine dry. Wipe the machine down after each use. This appliance is for dry use only and is not to be used or stored outdoors in wet conditions. For storage, keep the machine in a building.

WARNING: Operating a machine without observing all labels and instructional information could result in injury or damage. Read all machine labels before attempting to operate. Make sure all of the labels and instructional information are attached or fastened to the machine. Do not cover them for any reason. If labels or decals are missing or become damaged, get replacement labels and decals from your Clarke distributor immediately.

WARNING: Wet floor surfaces can be slippery. Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put "Caution" signs around/near the area you are cleaning.

WARNING: Improper discharge of waste water may damage the environment and be illegal.
The United States Environmental Protection Agency has established certain regulations regarding discharge of waste water. City, state and national regulations regarding this discharge may also be in effect in your area. Understand and follow the regulations in your area. Be aware of the environment hazards of chemicals that you dispose.

WARNING: Only use the brushes provided with the appliance or those specified in the Operator's Manual. The use of other brushes may impair safety.

CAUTION: Use of this machine to move other objects or to climb on could result in injury or damage. Do not use this machine as a step or furniture.

CAUTION: Your machine warranty will be voided if anything other than genuine Clarke parts are used on your machine. Always use Clarke parts for replacement.

CAUTION: This machine contains lead acid batteries. The batteries must be disposed of in an environmentally acceptable manner.

WARNING: GENERAL SAFETY RULES

The rules below have to be followed carefully in order to avoid injury to the operator and damage to the machine:

- During the operation of this machine, pay attention to other people around you, especially children.
- Use care when reversing machine in confined areas.
- Do not mix different kinds of detergents. Avoid harmful odors.
- Do not place any liquid containers on to the machine.
- The recommended operating temperature should be between 32° F and 104° F.
- The humidity for operating this machine should be between 30 and 95%.
- Do not use acid solutions that could damage the machine.
- In order to prevent floor damage, do not leave brushes running when machine is standing still.
- In case of fire, use a powder extinguisher. Do not use water.
- Do not strike shelving or scaffoldings, where there is danger of falling objects.
- Adapt the utilization speed to the adhesion conditions.
- Do not exceed the declared hill climbing capacity, otherwise the machine could become unstable.
- For any maintenance operation take off the power supply from the machine.
- Do not disassemble any parts which require the use of a tool to be removed.
- Do not wash the machine with direct water jets or with high water pressure nor with corrosive material.
- After every 200 working hours have machine checked by an authorized service person.

Introduction

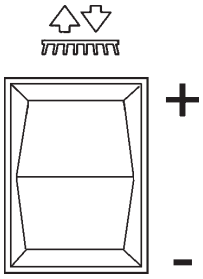
Introduction & Machine Specifications

This is a floor cleaning machine which, using the mechanic or abrasive action of brushes or pads and the chemical action of a water-detergent solution, is able to clean any type of floor. During its forward movement, it picks up the removed dirt and the detergent solution which has not been absorbed by the floor.

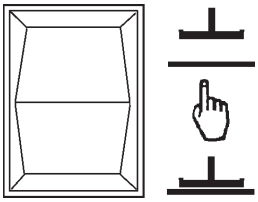
Model	28" Disc	34" Disc	28" Cylindrical	32" Boost™ Orbital
Part Number	003180K	00319K	00343K	00344K
Cleaning Swath	28" (71.1 cm)	34" (86.4 cm)	28" (71.1 cm)	32" (81.3 cm)
Power Supply	36 volt system using (6) 6 volt 250, 330, or 370 AH deep cycle batteries			
Battery Charger	On-Board fully automatic smart charger, 115V 60 Hz or 230V 50 Hz			
Brush Motors	(1) 2 hp (1.5 kW) driving two right angle gearboxes	(1) 2.5 hp (1.9 kW) driving two right angle gearboxes	(2) .75 hp (.56 kW)	(1) .75 hp (.56 kW)
Brush Size / Speed	(2) 14" (36 cm) 300 RPM	(2) 17" (43 cm) 300 RPM	(2) 6 x 28" (15.2 x 71.1 cm) 300 RPM	(1) 14 x 32" (35.6 x 81.3 cm) 2250 RPM
Brush Pressure	12 -225 lbs. (57-102 kg)		90-130 lbs. (41-59 kg)	115-155 lbs. (52-70 kg)
Traverse Speed (max)	4.1 mph (6.6 kph)			
Traverse	1.5 hp (1.1 kW) transaxle powering of two 10" (25.4 cm) diameter rear wheels			
Max. Cleaning Grade	6 degree			
Vacuum Motor	1 hp (.75 kW) 3 stage tangential discharge			
Noise Level	70 dBA			
Solution Tank	30 gallon (113 liter)			
Recovery Tank	30 gallon (113 liter)			
Length	65" (165 cm)			
Width	33" (84 cm)	35.5" (90 cm)	30" (130 cm)	33" (84 cm)
Height	56" (142 cm)			
Machine Weight w/330 AH batteries & full of solution	1478 lbs. (670 kg)	1498 lbs. (679 kg)	1498 lbs. (679 kg)	1488 lbs. (675 kg)
Warranty	8 years Polydur™ tanks, 3 years parts, 1 year labor, 18 months pro-rated batteries			

Symbols Used On FOCUS Rider

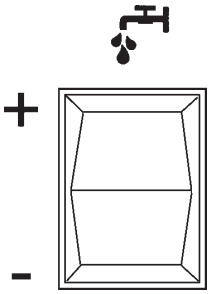
Brush Up/Down



Squeegee Up/Down

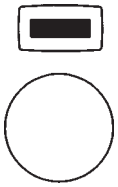


Solution Flow Switch



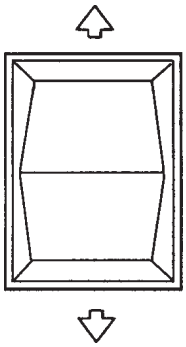
Battery Meter

LCD Display Button



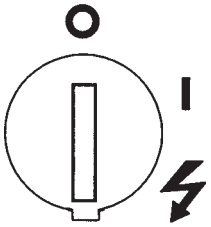
One Touch Button

Forward / Reverse

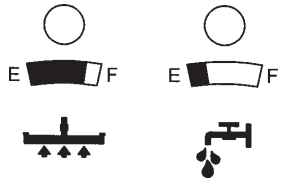


Horn

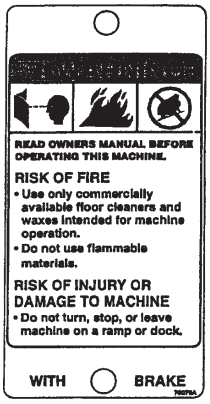
On/Off Switch



Recovery / Solution LED



Warning Label


READ OWNERS MANUAL BEFORE OPERATING THIS MACHINE.
RISK OF FIRE
• Use only commercially available floor cleaners and waxes intended for machine operation.
• Do not use flammable materials.
RISK OF INJURY OR DAMAGE TO MACHINE
• Do not turn, stop, or leave machine on a ramp or dock.
WITH
BRAKE

Display Screens For FOCUS Rider

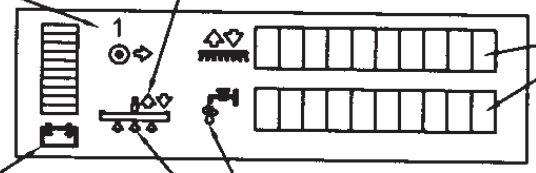
Traverse speed indicator
1 = low 0-2 mph
2 = med 0-3 mph
3 = high 0-4 mph

Position arrow indicating current position of squeegee (up or down)

Indicators are on, showing current settings.

Screens Available to Operator

SCREEN 1

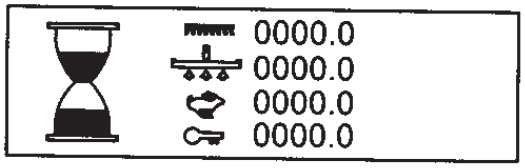


Water "droplets" off when solution is off and they are flashing when solution is on.

"Battery" blinks when low voltage occurs.

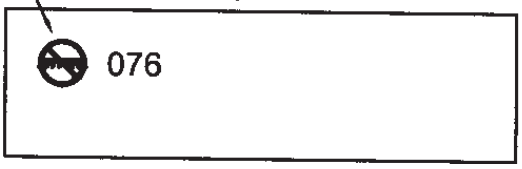
Arrows indicating vacuum status. They are flashing when vac is on and off when vac is off.

SCREEN 2



Example

SCREEN 3 (Diagnostic)



The Diagnostic only. It will not show unless a fault with the machine occurs. When the fault happens the icon and error code will be displayed.

Machine Control Panel

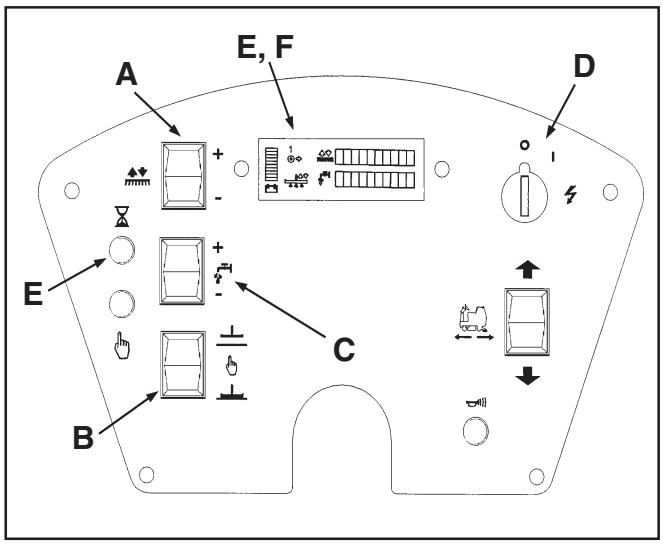


Figure 1

On/Off Key Switch (See figure 1, Item D)
The key switch turns “ON” the power to the control panel. “O” is the “OFF” and “I” is the “ON”.

Brush Up/Down Switch (See figure 1, Item A)
To lower brush head, push the brush switch in the down (+) position. To lower the brush head to maximum brush pressure, continue to hold the switch in the down (+) position until the travel stops. The brush motors will start and solution will flow (provided the solution is turned “ON”) when the machine begins to traverse. To raise the brush head, push the brush switch in the up (-) position until the brush head travel stops or desired position is reached.

Squeegee Up/Down Switch (See figure 1, Item B)
The squeegee switch is used to raise and lower the squeegee and to turn on and off the vacuum motor. The vacuum motor is turned on when the switch is placed in the middle or lower position. **NOTE: When the squeegee switch is placed in the lower position, the vacuum motor will turn on.**

To raise the squeegee, place the switch in either the middle or up position. The middle position is used for one touch control. The vacuum motor will stop, after a short delay, when the switch is placed in the up position.

Hour Meter (See figure 1, Item E)
The hour meter is located on the front display. You must toggle screens using LCD display button. The hour meter indicates the number of hours the machine has operated. It displays brush motor, vacuum motor, traverse motor and total key on times.

Battery Meter (See figure 1, Item F)
The battery meter indicates the relative charge on the battery pack. The battery meter is located on screen 1 on the front display. See page 7.

Solution Flow Control (See figure 1, Item C)
The solution flow switch regulates the flow of chemical solution to the floor. To increase the flow, toggle (+). To decrease the flow, toggle (-). To shut off the solution, toggle - until no indicators are visible on display (see figure 2). **NOTE: DO NOT run dry! NOTE: No solution will flow when the machine does not traverse.**

Circuit Breakers
The circuit breaker reset buttons are located on the back side of the front cover below front display. The breakers are as follows:
Item A - Main (5 amp)
Item B - Key Switch (5 amp)

Machine Controls and Features

Recovery Tank Float
The FOCUS Rider Scrubber is equipped with a float that shuts the vacuum off when the recovery tank is full. The squeegee will no longer pick up water. If this should happen, raise the squeegee and empty the recovery tank.

The Traverse
The FOCUS Rider Scrubber is equipped with an electronically controlled traverse system with variable speeds in forward and reverse.

1. To traverse the machine, the power to the machine must be turned on with the key switch and the operator must be properly seated. The joystick must be positioned in either the forward or reverse direction.

2. The traverse speed and direction can be adjusted by varying the pressure and direction of the joystick.

3. The joystick is very responsive. Simply point it in the direction you wish to go. **NOTE: For initial training, keep speed setting in 1 and train in an open area.**

NOTE: During reverse motion, the squeegee raises and the solution flow stops automatically. Reverse also reduces maximum traverse speed.

4. The front wheel always returns to center when you remove your hand from the joystick.

Brakes
The machine is equipped with an electronic braking system. The electronic braking is activated automatically when the operator's hand is removed from the joystick. NOTE: During training, you should allow machine to come to a full stop until you become familiar with stopping distances required.

Parking Brake
The parking brake is activated automatically when the machine comes to a stop. It disengages automatically when you begin to traverse. The transaxle is equipped with a manual brake release. NOTE: Machine will not function when manual brake release is engaged. See figure 2.

Reverse Alarm
The reverse alarm will sound intermittently and automatically when the machine is in reverse.

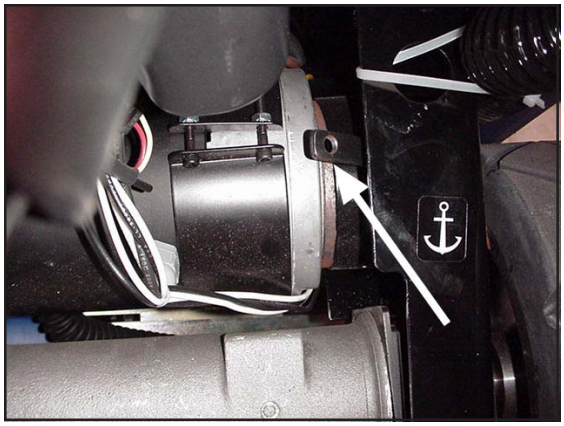


Figure 2

How To Prepare the Machine For Operation

How To Handle the Packed Machine
The machine is packed in a specific package provided on a pallet so that it can be moved with a forklift.

WARNING: The packages cannot be placed on top of each other.

How to Unpack the Machine

1. Remove the outer package.
2. The machine is fixed on the pallet with banding straps and wooden blocks to prevent movement during shipment. Remove the bands and blocks.
3. The machine is shipped with the batteries already installed.
4. Remove tie down brackets.
5. Lower the ramp. The machine can be driven off of the pallet if the operator is thoroughly familiar with its operation. Avoid violent blows to the base unit.
6. Keep the pallet for future transport necessities.

How to Install the Batteries

WARNING: The batteries are heavy. Lifting batteries without help could result in an injury. Get help to lift the batteries.

WARNING: Working with batteries can be dangerous. Always wear eye protection and protective clothing when working near batteries. NO SMOKING!

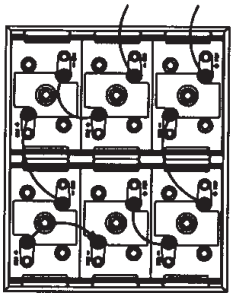
WARNING: Hydrogen gas is formed during the charging operation and is explosive. Only charge batteries in a well ventilated area with the seat base lifted.

The batteries are fitted in the battery compartment under the seat and recovery tank (figure 3). The machine uses six - 6 volt batteries. They must be handled by using appropriate lifting equipment suitable for the weight and for the coupler system. For maintenance and daily recharge of the batteries, it is necessary to follow all instructions given by the manufacturer.

For Battery Installation follow these steps (See figure 3):

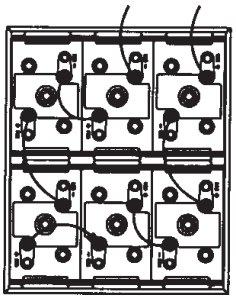
1. Make sure that the key switch is in the “OFF” position.
2. Lift and rotate the base support of the seat forward.
3. Lean the seat on it’s restraint cable.
4. Lift the front of the recovery tank and rotate it towards the rear until it rests on it’s restraint cable.
5. Put the batteries into position and connect the battery cables as shown in figure 3.
6. Rotate the recovery tank and then carefully rotate it forward to the normal operating position.
7. Lower the base support of the seat.
   NOTE: Charge the batteries before using.

BATTERY CONNECTIONS



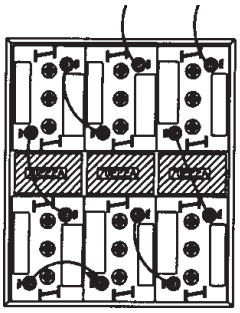
Front of machine

370 AH, 6 Volt
(Battery No. 40704A Wet)
(Battery No. 40602A Dry)



Front of machine

330 AH, 6 Volt
(Battery No. 891384 Wet)
(Battery No. 891385 Dry)



Front of machine

250 AH, 6 Volt
(Battery No. 881317 Wet)
(Battery No. 881318 Dry)
Three (3) 70222A Spacers

Figure 3

How To Prepare the Machine For Operation

Battery Maintenance

The electrical power to operate the machine comes from the storage batteries. Storage batteries need preventative maintenance.

WARNING: **Working with batteries can be dangerous. Always wear eye protection and protective clothing when working near batteries. NO SMOKING!**

To maintain the batteries in good condition, follow these instructions:

1. Keep the electrolyte at the correct level. The correct level is between 1/4" (1/2 cm) below the bottom of the tube in each cell and above the tops of the plates. Check the level of the electrolyte each time you charge the batteries (see figure 4).

NOTE: Check the level of electrolyte prior to charging the batteries. Be sure the plates in each cell are covered with electrolyte before charging. Do not top off the cells prior to charging the battery. Electrolyte expands during charging. As a result, the electrolyte could overflow from the cells. Always top off the cells with distilled water after charging.

CAUTION: **Irreversible damage will occur to the batteries if electrolyte does not cover the plates. Keep the electrolyte at the correct level.**

CAUTION: **Machine damage and discharge across the tops of the batteries can occur if the batteries are over filled. Do not fill the batteries up to the bottom of the tube in each cell. Wipe any acid from the machine or the tops of the batteries. Never add acid to a battery after installation.**

CAUTION: **Batteries must be refilled with distilled water only. Do not use tap water as it may contain contaminants that will damage batteries.**

2. Keep the tops of the batteries clean and dry. Keep the terminals and connectors clean. To clean the top of the batteries, use a damp cloth with a weak solution of ammonia or bicarbonate of soda solution. To clean the terminals and connectors, use a terminal and connector cleaning tool. Do not allow ammonia or bicarbonate of soda to get into the batteries.

3. Keep the batteries charged.

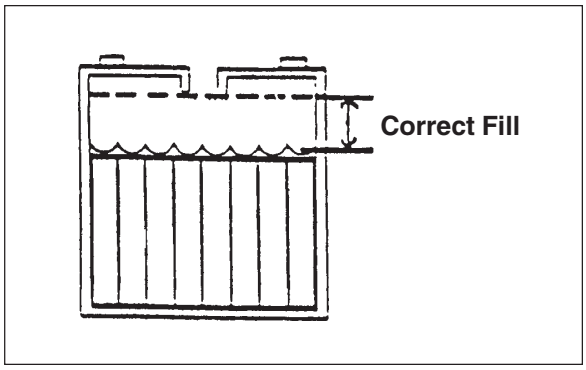


Figure 4

How To Prepare the Machine For Operation

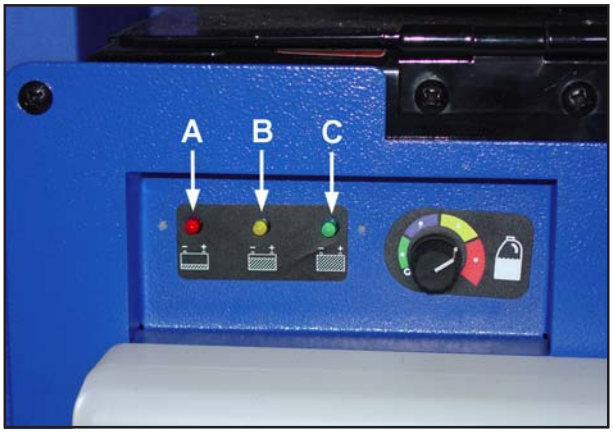
How to Charge the Batteries

WARNING: **Charging the batteries in an area without adequate ventilation could result in an explosion. To prevent an explosion, charge the batteries only in an area with good ventilation.**

WARNING: **Lead acid batteries generate gases which could explode. Keep sparks and flames away from batteries. NO SMOKING!**

To charge the batteries, follow this procedure:

1. Make sure the key switch is in the “OFF” position.
2. Raise the seat base support.
3. Connect the battery charger AC cord to a 15 amp (min) 120V properly grounded wall receptacle.
4. Observe indicator light to ensure the charging process has started (see figure 5, A - Red, B - Yellow, and C - Green). For color indications see figure 6.



(Shown with Optional Chemical Mixing System)
Figure 5

Recharging the Batteries

The Focus Rider Scrubber comes with an on board charger.

1. Plug into any wall socket and charging is automatic.
2. Observe indicator light to ensure the charging process has started (see figure 5, A - Red, B - Yellow, and C - Green). For color indications see figure 6.

NOTE: Make sure you plug into a circuit that is not loaded by other equipment. Wall breakers may be tripped and no charge will occur.

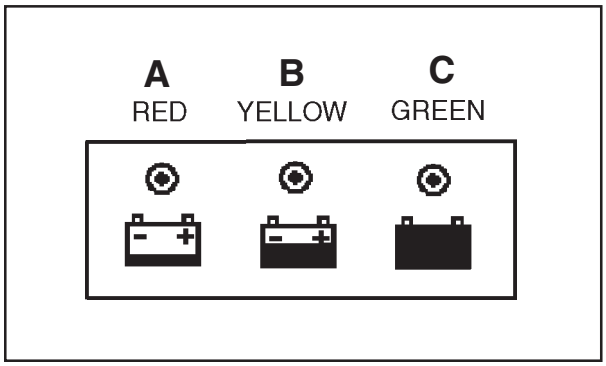


Figure 6

WARNING: **Never charge a GEL battery with an unsuitable battery charger. Carefully follow the instructions given by the manufacturer of the batteries and battery charger.**

NOTE: To prevent permanent damage to the batteries, avoid their complete discharge. Never leave the batteries completely discharged, even if the machine is not being used. When recharging the batteries, keep the base support of the seat lifted. After every 20 recharging operations, check the level of the electrolyte and if necessary top off with distilled water.

Level Indicators for the Charge of the Batteries

The battery meter (see figure 7) on the control panel has a digital read out with 10 fixed positions (A) and also a blinking indicator (B). The bars that appear on the display show the approximate charge level with icon (blinking) discharged battery.

NOTE: A few seconds after the voltage reads 32V it will start blinking. The brush motors will then automatically switch off.

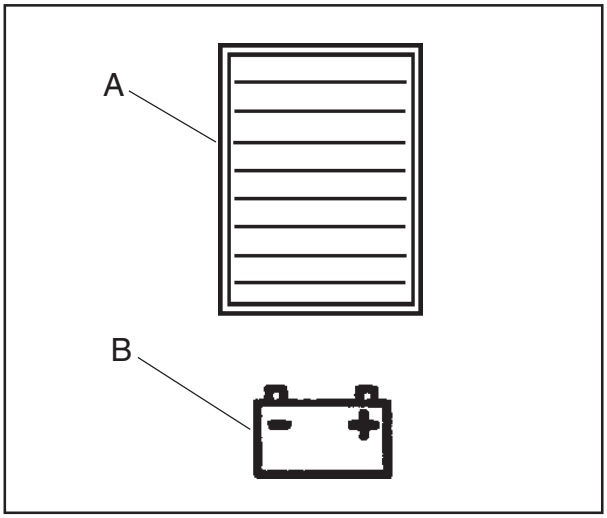


Figure 7

How To Prepare the Machine For Operation

How To Install the Squeegee

To install the squeegee onto the machine, follow this procedure:

1. The squeegee assembly has a break away feature that is also used for mounting the squeegee. Loosen the knobs on the squeegee (figure 8). Slide the stud into the slotted hole in the support frame on the machine.

2. Attach the vacuum hose cuff to the squeegee hose fitting (see figure 9).

3. Tighten knobs. **NOTE: Do not overtighten or break away feature is lost and damage may occur.**

NOTE: To prevent damage to the squeegee or machine, the squeegee was designed to break away from the machine. If the squeegee is impacted and it breaks away from the machine, simply reinstall it by following step 1-3.

How to Adjust the Squeegee

During operation, the rear squeegee blade should have a constant 3/16" minimum flare along the entire squeegee blade (see figure 10).

1. The squeegee body can be tilted to adjust the squeegee blade flare in the middle to match the flare on the ends. To adjust the tilt, loosen the adjusting bolt located on the left and right side of the squeegee (see figure 9).

2. Press down on the squeegee until both sets of guide wheels contact floor.

3. After making adjustments, retighten the screw(s).

NOTE: It is important that the right and left wheels are contacting the floor in order for the squeegee to work.

NOTE: As the rear squeegee blade wears, it can be rotated and/or flipped to obtain four good edges before having to change blades.

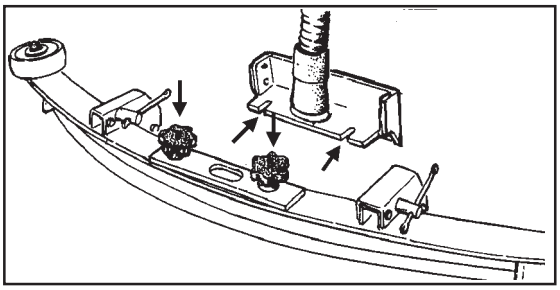


Figure 8

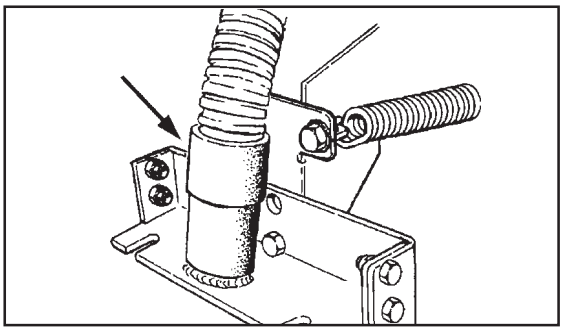


Figure 9

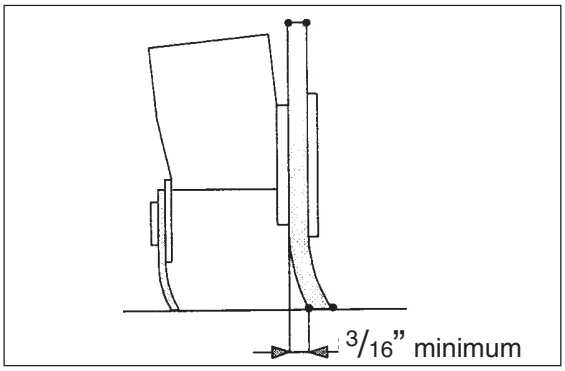


Figure 10

How To Prepare the Machine For Operation

How To Change or Rotate Brushes on Cylindrical Brush Head

To install or rotate brushes on the cylindrical brush head:

1. Raise the brush deck and turn the key switch “OFF”.
2. Raise the brush skirt and pull out to remove. See figure 11.
3. Remove thumb screw from brush door. See figure 12.
4. Lower door approximately 1/2 inch and slide door and hub assembly from brush. See figure 13.
5. Slide brush off hub at opposite end. See figure 14.
6. Rotate brush or replace.
7. Slide brush on drive hub and insert door and hub assembly into brush core.
8. Raise door and install thumb screw.
9. Place side skirt on retainer pins and lower in place.
10. Brushes should be rotated after every 20 hours of use.

Figure 11

Figure 12

Figure 13

Figure 14

How To Prepare the Machine For Operation

How To Install The Brush Or Pad on the BOOST machine

To install the brush or pad on the BOOST machine, follow this procedure:

1. Turn the key switch "ON".
2. Put the brush switch in the "UP" position.
3. Turn the key switch "OFF".
4. Go to the side of the machine.
5. Press on a brush or pad under the flex plates. See figure 15.

   NOTE: When using a black pad, position pad on head. Lower head and operate momentarily to affix pad to pad driver (if you have difficulty, position pad on floor and lower head then operate.)

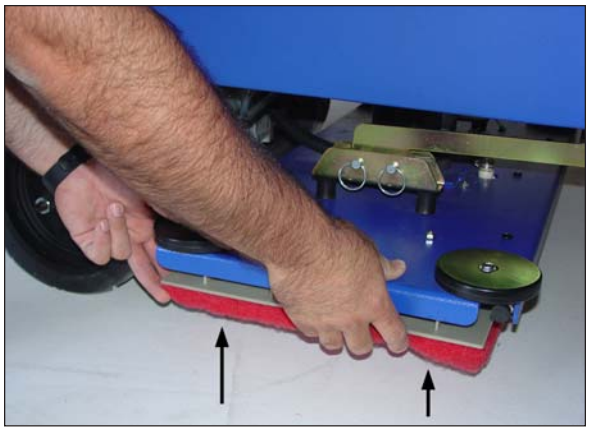


Figure 15

How To Remove The Brush Or Pad on the BOOST machine

To remove the brush or pad from the machine, follow this procedure:

1. Turn the key switch "ON".
2. Put the brush switch in the "UP" position.
3. Turn the key switch "OFF".
4. Go to the side of the machine.
5. Pull downward on the brush or pad until it releases from the flex plates. See figure 16.

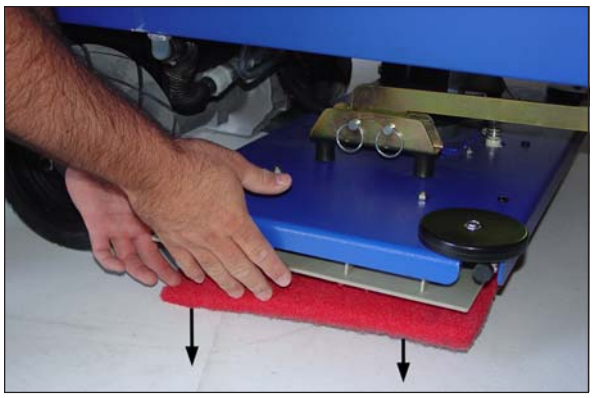


Figure 16

How To Operate The Machine

How to Return One Touch to Factory Default Settings
To restore the factory settings, follow the procedures below:

1. Press and hold the green one touch button (figure 17, B) until you hear a *double beep* from the machine. **NOTE: The time required for this will be approximately 15 seconds.**

2. The settings should be returned to 2 bars of solution and 1 bar of brush pressure. **NOTE: The squeegee vac switch must be in the middle position for default settings to work.**

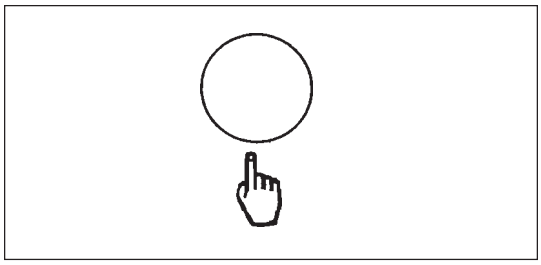


Figure 17

How to Move the Machine Without Power (see figure 18)

1. Disengage manual override on brake (see page 9, “Parking Brake”).

2. Remove foot plate and 4 screws and locate steering motor.

3. Using the knob on steering motor, turn shaft on motor in direction you wish to turn machine.

4. Slowly push machine to desired location. **NOTE: If you attempt to push machine too fast it will limit top speed. If this happens, stop and restart.**

5. After moving machine, re-engage manual brake override. **NOTE: Machine will not function if override is engaged.**

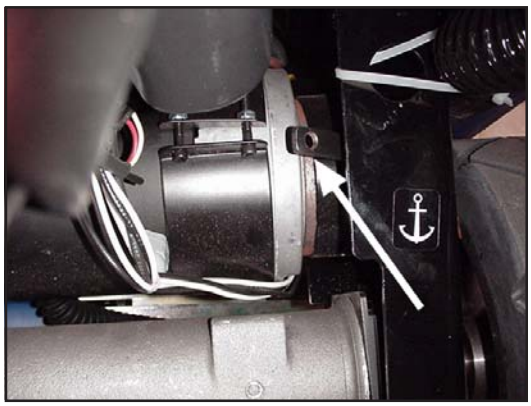


Figure 18

Seat Adjustment (Standard)
The standard seat is not adjustable forward or backward.

Seat Adjustment (Deluxe)
The optional deluxe seat is adjustable in three ways:

1. The seat can be adjusted to the forward/backward position by using the lever on the lower right side of the seat . Moving the lever will allow the seat to slide into the preferred position. See figure 19.

2. To adjust the angle of the back support portion of the seat, turn the lever located in the middle right position of the seat. Turning this clockwise will make the seat more vertical. Turning the knob counterclockwise will tilt the seat back. See figure 20 A.

3. To adjust the suspension of the seat for operator comfort, use the lever on the side of the back support section of the seat. This has three positions. The upper position is for light weight operators. The middle position is for medium weight operators. The bottom position is for heavy weight operators. See figure 20, B. **NOTE: The lever must be pressed firmly to change positions.**

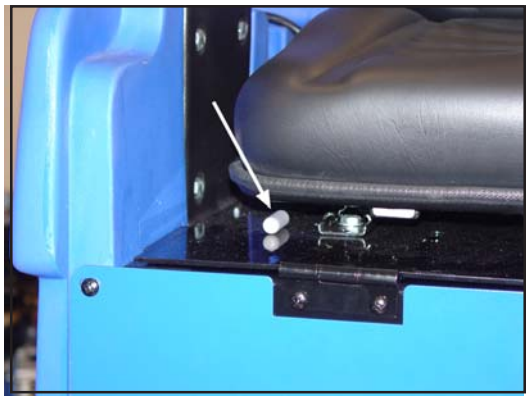


Figure 19

Figure 20

How To Operate the Machine

How to Read the Battery Meter (see figure 21, A)
The battery meter is an indicator on the LCD display. This indicator is on the LCD display on the front of the machine. It has 10 bars with 10 bars visible indicating a full charge. As you run the machine the bars will begin to lower. The "Battery Icon" (B) will begin to flash to indicate you are reaching the end of charge.

NOTE: If you continue to run the brushes they will shut down to protect the batteries from over discharging.

NOTE: Run times will vary depending on machine variables, battery size, brush pressure and floor type, etc.

How to Change Displays Screens on the LCD Module
The LCD display has three screens. Two of them can be accessed at any time the key is on. The first screen shows the machine status and the second screen shows the four hour meters (figure 21).

The two screens that can be viewed by the operator can be accessed via the display button (figure 22) on the control panel to the left of the key switch. Pressing this button toggles the display between the available screens.

The third screen is for diagnostics only. This screen displays any errors that might occur or if the system diagnostics finds something wrong. When the diagnostic screen comes up, refer to the trouble shooting guide for suitable action to resolve the error code.

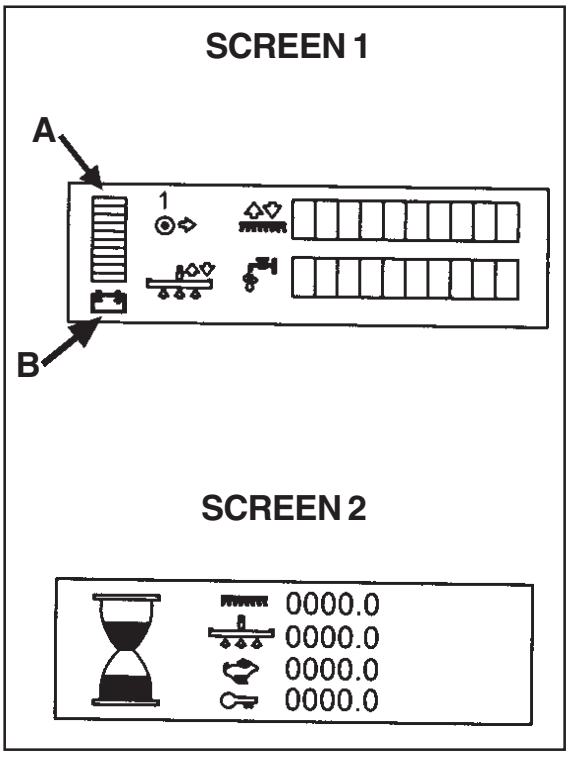


Figure 21

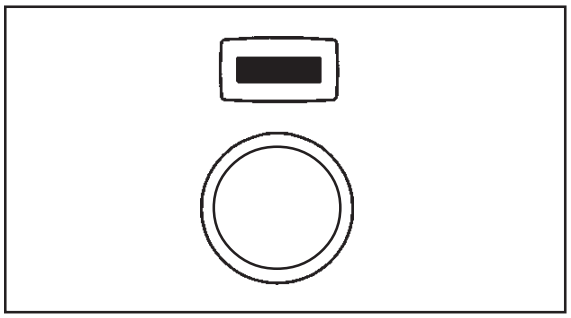


Figure 22

How to Read the Solution Empty Indicator (see figure 23, A)
The solution empty indicator is located on the front of the machine below the LCD display. When the solution reaches nearly empty, the indicator will begin to flash, warning the operator of the need to refill.
NOTE: Solution run times will vary depending on solution flow setting.

How to Read the Recovery Full Indicator (see figure 23, B)
The recovery full indicator is located on the front of the machine below the LCD display. When the recover tank is near full the indicator will begin to flash, warning the operator of the need to empty the recovery tank. The vacuum motors will shut down a few moments later.
NOTE: Recovery times will vary depending on solution flow setting and floor type.

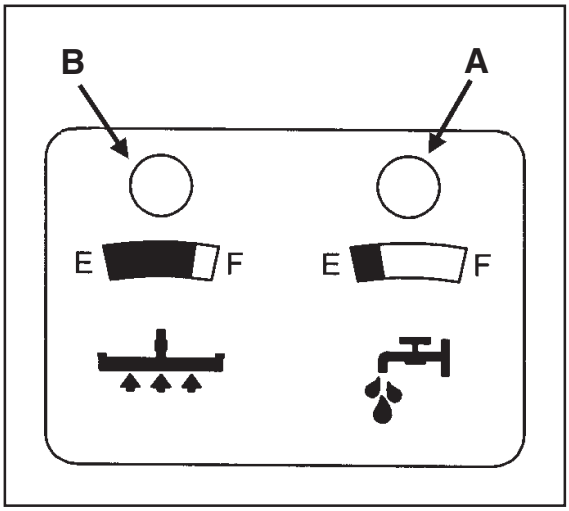


Figure 23

How To Operate the Machine

How to Operate the Squeegee and the Vacuum Motor
The squeegee wipes the floor while the vacuum motor removes the dirty solution from the floor. To operate the squeegee, follow this procedure:

1. To lower the squeegee and start the vacuum motor, press the squeegee up/down switch to the down position (figure 24). **NOTE: The vacuum motor will start immediately when the down position of the switch is pressed, and the squeegee will lower.**

2. To raise the squeegee, press the squeegee up/down switch to the up position (figure 24). The squeegee will then raise and the vacuum motor will shut off after short delay **NOTE: The center position of the squeegee up/down switch is for use with one touch control.**

NOTE: The squeegee will raise automatically when traversing in reverse during scrubbing operations.

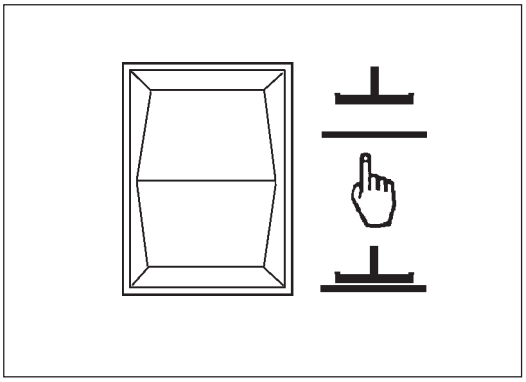


Figure 24

How to Operate the Solution Flow
The solution is used to loosen and remove dirt from the floor. The amount of solution applied can be adjusted to five different levels to accommodate many different floor conditions. These different levels are shown on the LCD display on the front of the machine. To adjust the amount of solution applied, use the Solution Flow Switch (figure 25). **NOTE: There are five different settings on the display. See figure 26, A.**

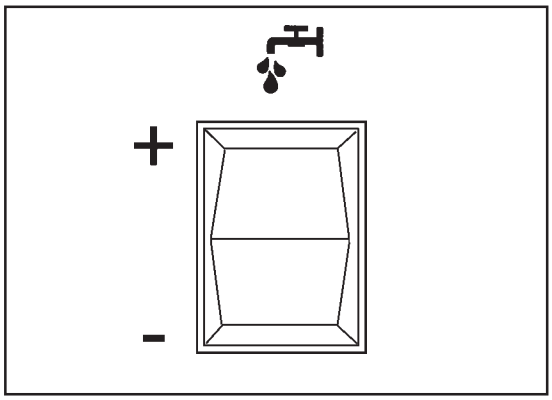


Figure 25

To increase solution flow:

1. Press the " + " side of the switch (figure 25).

2. Press and hold the " + " switch to achieve the desired level of solution flow.

To decrease solution flow:

.

1. Press the " - " side of the switch (figure 25).

2. Press and hold the " - " side of the switch to achieve the desired level of solution flow.

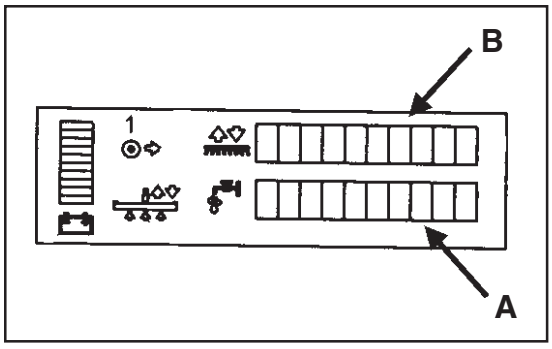


Figure 26

How to Operate the Brush Pressure
The brushes are used to supply agitation for the solution, which improves the cleaning process. The amount of brush pressure applied can be adjusted to five different levels to accommodate many different floor conditions. These different levels are shown on the LCD display on the front of the machine (figure 26, B). To adjust the amount of brush pressure, use the brush up/down switch (figure 27).

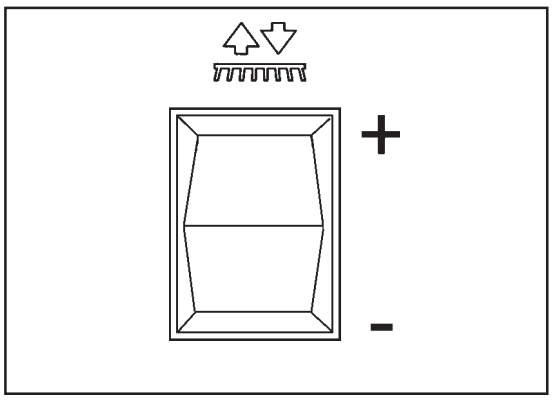


Figure 27

To increase brush pressure:

1. Press the " + " side of the switch (figure 27).

2. Press and hold the " + " switch to achieve maximum level of pressure.

To decrease brush pressure:

.

1. Press the " - " side of the switch (figure 27).

2. Press and hold the " - " side of the switch to achieve maximum or no brush pressure.

How To Operate the Machine

How to Operate the Forward / Reverse Switch
(see figure 28).

1. To go forward, push the up arrow side of the switch.
2. To go in reverse, push the down arrow side of the switch.

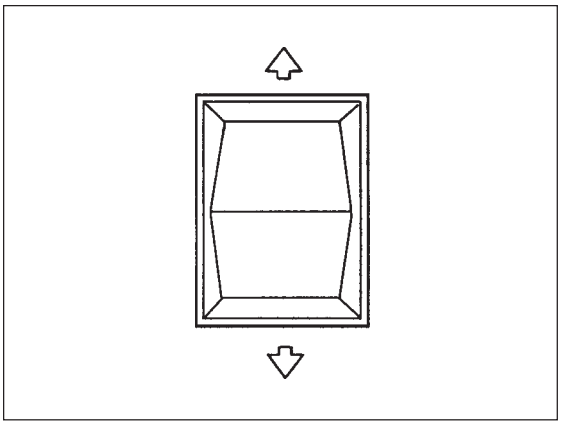


Figure 28

How to Fill the Solution Tank
The solution tank fill port is located at the left side of the machine (see figure 29). To fill the solution tank, follow this procedure:

1. Turn the key switch to the "OFF" position.
2. Remove lid.
3. Add a cleaning chemical to the solution tank. For the correct amount of chemical, follow the directions shown on the container. **NOTE: Excess foam in the recovery tank could damage the vacuum motor, so use only the minimum amount of detergent necessary.**

WARNING: **Always use low foam detergent. To avoid the production of foam, before starting to clean, put a minimum quantity of antifoam liquid into the recovery tank. NEVER USE PURE ACID.**

4. Fill the solution tank with clean water (see figure 29).
5. After filling the solution tank, replace the solution tank lid.

Figure 29

WARNING: **Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put CAUTION signs near the area you are cleaning.**

WARNING: **Machines can ignite flammable materials and vapors. Do not use with or near flammables such as gasoline, grain dust, solvents and thinners. Only use a cleaning concentration recommended by the chemical manufacturer.**

WARNING: **Clarke recommends a maximum water temperature of 120°F (49°C).**

Operating the Machine
NOTE: Before scrubbing with the machine, become familiar with the operations and handling of the machine. Run the machine at the lowest traverse speed. Use the machine in an area that has no furniture or objects until you can do the following:

1. Traverse the machine in a straight direction, forward and backward.
2. Stop the machine safely.
3. Turn the machine both left and right and return to a straight direction.
4. Turn a 180° turn where one rear wheel just pivots.

How To Operate the Machine (cont.)

To traverse the machine follow this procedure:

1. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
2. Turn the key switch to the “ON” position.
3. Raise the brush to the highest position (if necessary).
4. Raise the squeegee (if necessary).
6. Gently press on the joystick in the direction you want to travel. The machine will begin to move.
7. To change the speed of the machine move the joystick. Move it in the direction you want to travel.
8. To stop, release pressure on the joystick and allow it to re-center.
9. To travel in reverse, move the joystick in the reverse position. **NOTE: Keep the joystick pointed in the direction you wish to go.**
10. To stop, release the joystick.
11. To turn the machine, move the joystick in the direction you want to turn.
14. When you stop the machine, turn the key switch “OFF” and remove the key.

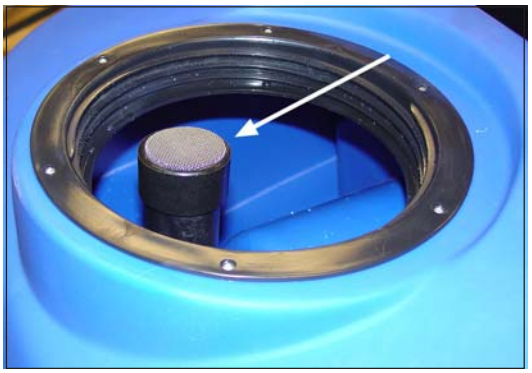


Figure 30

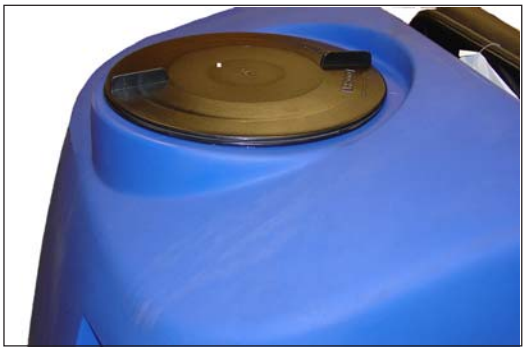


Figure 31

<u>Do These Procedures When You Begin Your Work Period</u>

1. Make sure the key switch is in the “OFF” position.
2. Disconnect AC power from battery charger (follow charger instructions).
3. Make sure the filter screen (1) to the vacuum motor is clean and installed properly in the recovery tank (see figure 30).
4. Make sure the recovery tank lid is in place and has been tightened (see figure 31).
5. Close and secure the lower cleaning port cover (if so equipped) on the recovery tank.
6. Make sure that the plug in the recovery drain hose is in place and has been tightened (see figure 32).
7. Make sure that the brushes/pads are in position and installed correctly.
8. Make sure the brush housings are in position on the brush head.
9. Check the installation of the squeegee and squeegee hose.

Figure 32

How To Operate the Machine

How to Clean a Floor

WARNING: **Water solutions or cleaning materials used with this type of machine can leave wet areas on the floor surface. These areas can cause a dangerous condition for the operator or other persons. Always put CAUTION signs near the area you are cleaning.**

For one touch automatic cleaning follow this procedure:

1. Turn the key switch to the “OFF” position.
2. Put the water and a cleaning chemical in the solution tank.
3. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
4. Turn the key switch “ON”. **NOTE: The key switch turns on the battery and LED screen displays, which shows the machines condition.**
5. The machine has a one touch button on the joystick (see figure 33) that is preset for brush pressure and solution flow. Momentarily depress the one touch button if you wish to use these settings. **NOTE: If this is not the settings that you desire see page 16 or one touch operation.**

For manual control of cleaning process, follow these procedures:

1. Turn the key switch to the “OFF” position.
2. Put the water and a cleaning chemical in the solution tank.
3. Sit on the driver seat. **NOTE: The machine will not traverse if the operator is not properly seated.**
4. Turn the key switch “ON”. **NOTE: The key switch turns on the battery and LED screen displays, which shows the machines condition.**
5. Lower the squeegee. **NOTE: The vacuum motor will turn on when the squeegee up/down switch is placed in the lower position.**
6. Lower the brush head until it reaches the full stroke down. **NOTE: The brushes will start rotating only when the machine begins to traverse.**
7. Reset the solution flow valve by using the + / - solution switch. **NOTE: The solution will flow only if the machine is moving forward.**
8. Press the joystick in the desired direction/position. After the joystick is pressed the machine will begin to move and the brushes will start to rotate and solution will begin to flow.
9. After a few feet of scrubbing, check to see that the amount of solution being applied is correct and that the squeegee is picking up water and drying the floor. Make adjustments as required.
10. Once the machine is set properly continue to scrub until the solution low indicator comes on or until you run out of solution.

WARNING: **If the machine develops operating problems while working, remove your hand from the joystick. After resolving the problem, continue working.**

NOTE: When making multiple passes across the floor, overlap the brush cleaning path approximately 2 inches (5 cm) of the area already cleaned by the brush.

NOTE: During most cleaning procedures, apply and remove the solution in one operation.

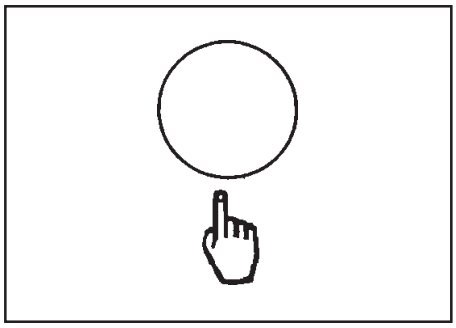


Figure 33

How To Operate the Machine

How to Clean a Very Dirty Floor
To clean a very dirty floor, follow this procedure:

1. Apply solution to the floor.
2. Do not lower the squeegee. This will keep the vacuum motor off.
3. Lower the brush or pad and scrub the floor.
4. Scrub the floor again with additional solution and lower the squeegee.
5. Pick up all the solution with the squeegee.

Do These Procedures When You End Your Work Period
Having finished the job and before any type of maintenance is done, follow these procedures:

For one touch cleaning shut down process, press and release the one touch button.

For manual shut down follow these procedures:

1. Turn the solution flow off by decreasing the flow to its minimum position.
2. Press the brush up/down switch to the up position until the brush head has reached its up most position.
3. Place the squeegee up/down switch in the up position to raise the squeegee and allow the vacuum motor to continue to run. The vacuum motor will run for another 20 seconds and then place the squeegee up/down switch to the up position. This will shut the vacuum motor off.
4. Take the machine to a water drain.
5. Turn the key switch “OFF”.
6. Remove the drain hose from the holding hook.
7. Put the end of the hose over a drain or bucket.
8. Turn the valve housing to the left (see figure 34).
9. To open the valve completely, turn the housing fully to the left. Pull the housing off of the valve.
10. Empty the recovery tank. **NOTE: When hose is lowered below water level, water will flow.**

WARNING: **Use gloves to protect your hands from contact with dangerous solutions when preforming the steps listed above.**

Figure 34

How To Operate the Machine

11. Rinse the tank. Put clean water in the tank through the opening at the top. Be careful not to allow water into the vacuum intake tube (with screen).

12. If the tank or drain hose has an obstruction, use water pressure to flush the tank or hose. Put the water hose into the drain hose. **NOTE: Do not place water hose into standpipe.**

13. Leave the tank and drain plug removed to air dry.

14. Check the squeegee blade. Use a cloth to clean the squeegee blade. If the squeegee blade is damaged or worn, turn or replace the blade.

    NOTE: To avoid damage to the squeegee, the squeegee must be lifted when the machine is not in operation.

15. Take off the brushes and clean them with a jet stream of water.

16. Use a clean cloth and wipe the surface of the machine.

17. Check the batteries and add distilled water as needed. The correct level is between ¼" (½ cm) below the bottom of the tube in each cell and above the tops of the plates. See the instructions in the section of this book called "Battery Maintenance".

⚠ CAUTION: **Tap water may contain contaminants that will damage batteries. Batteries must be refilled with distilled water only.**

⚠ WARNING: **Lead acid batteries generate gases which can cause an explosion. NO SMOKING. Always wear eye protection and protection clothing when working near batteries.**

18. Charge the batteries. See the instructions in the section of this book called "How to Charge the Batteries".

Maintenance

Maintenance To Be Done Every Week

WARNING: **Maintenance and repairs must be done by authorized personnel only. Always empty the solution tank and the recovery tank before doing any maintenance. Keep all fasteners tight.**

WARNING: **Always wear eye protection and protective clothing when working near batteries. NO SMOKING! Do not put tools or other metal objects across the battery terminals or the tops of the batteries.**

CAUTION: **To prevent damage to the machine, and discharge across the tops of the batteries, do not fill the batteries above the bottom of the tube in each cell. Wipe any acid from the machine or the tops of the batteries. Do not add acid to batteries after installation.**

Battery Inspection and Cleaning

1. Turn the key switch to the “OFF” position.
2. To inspect batteries, rotate seat support forward. Lift and rotate recovery tank. Be sure the recovery tank is empty before lifting.
3. Disconnect the batteries. Use a cloth and a solution of ammonia or bicarbonate of soda to wipe the top of the batteries. Clean the battery terminals. Reconnect the batteries. See the instructions in the section of this book called “Battery Maintenance”.
4. When battery inspection is completed, close the recovery tank. Rotate the seat support back to the operating position.

Cleaning the Recovery Tank and Filter

1. Turn the key switch to the “OFF” position.
2. Empty the recovery tank using the flexible drain hose by unscrewing the knob and taking off the plug (see figure 35).
3. If the machine is equipped with the optional clean-out port, open the lower cleaning port cover by unscrewing the four knobs (see figure 36). **NOTE: Make sure that the tank is empty first.**
4. Rinse the tank and clean the drain plug.

Figure 35

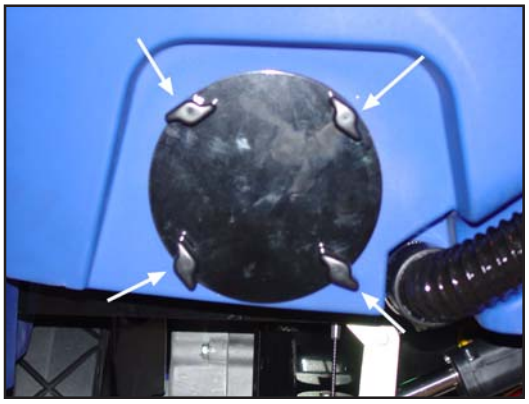


Figure 36

Maintenance

5. Clean the hose fitting in the recovery tank and spray water down the squeegee hose to clean out debris.

6. Reattach the squeegee hose.

Figure 37

Cleaning the Solution Tank and Filter

1. Move the machine so that the solution tank filter assembly is located directly over a floor drain.

2. Turn the key switch to the “OFF” position.

3. Clean inside the solution tank with a jet stream of water.

7. Close the solution flow valve.

8. Clean the filter inside the housing and reinstall on machine.

Manually Draining the Solution Tank

1. Remove sight gauge hose from top connector (see figure 37).

2. Rotate lower fitting to allow drain hose to rest over drain.

3. Drain solution tank (see figure 38).

Figure 38

Vac Assisted Solution Tank Drain

1. Remove vacuum hose from squeegee plate.

2. Turn vac on.

3. Remove and place solution hose into vac hose until washer rest against hose cuff.

NOTE: Using vac assist will help to rinse recovery tank. This will help to reduce cleanup and maintenance times.

Squeegee Maintenance
Clean the squeegee with a jet stream of water and a damp cloth. Inspect the front and rear squeegee blades for wear. Readjust or replace if necessary.

Front Squeegee Blade Replacement
To replace the front squeegee blade, follow this procedure:

1. Remove the squeegee assembly from the machine.

2. Remove clamp and front squeegee blade.

3. Install new front squeegee blade and reinstall clamp.

4. Replace squeegee on machine.

Maintenance

Rear Squeegee Blade Replacement
If the rear squeegee blade is worn and does not dry the floor well, follow this procedure:

1. Remove the squeegee assembly from the machine.
2. Remove the squeegee blade and inspect it.
3. Rotate the squeegee blade to obtain a new cleaning edge. Replace if necessary.
4. Reinstall the squeegee blade.
5. Reinstall the squeegee assembly on the machine.
6. Readjust the settings on the squeegee as required (see “How to Adjust Squeegee”).

Squeegee Maintenance
The squeegee blade may be rotated for longer life. Keep sharp corner on floor for best cleaning results. See figure 39. To rotate follow this procedure:

1. Remove Clamp.
2. Remove blade and rotate to new edge.
3. Replace squeegee.
4. Replace clamp.

Cleaning the Vacuum Hoses
Make sure the squeegee is over a suitable drain.

1. Use a garden hose to flush through the recovery hoses.
2. Side Squeegee - Position garden hose to the squeegee side of the hose and flush thoroughly.
3. Recovery Hose - Position garden hose inside recovery tank. Recovery hose is located behind threaded lip. **NOTE: Do not place hose in vacuum intake (see figure 40), damage will occur.**

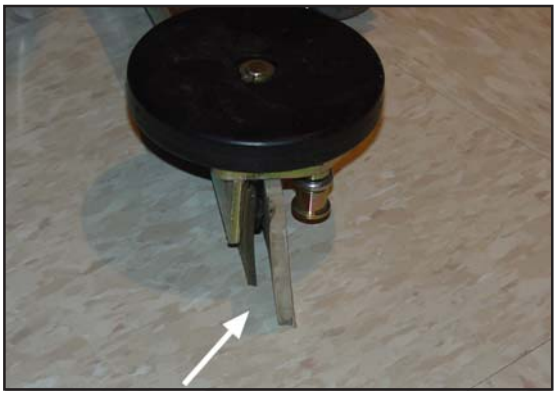


Figure 39

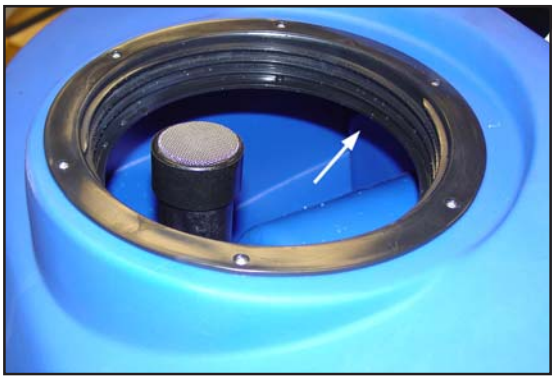


Figure 40

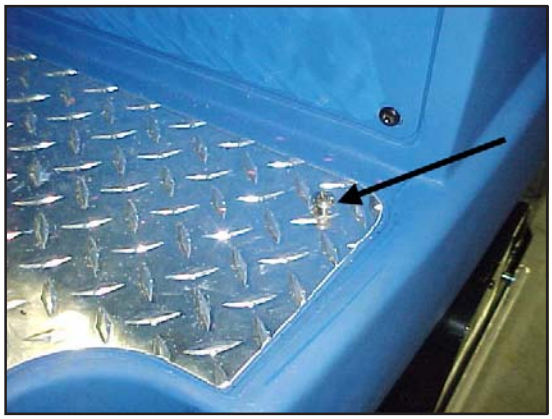


Figure 41

HOW TO CORRECT PROBLEMS IN THE MACHINE

PROBLEM	CAUSE	ACTION
Insufficient water onto the brushes	The solution flow is not set	Make sure the solution flow is set.
	There is no water in the solution tank.	Fill the solution tank.
	The solution filter is dirty.	Clean the solution filter.
	A circuit breaker has tripped.	Reset the circuit breaker.
	Insufficient flow.	Increase flow with solution switch.
The machine does not clean satisfactorily	The brushes are worn.	Check the brushes and replace if necessary. (the brushes have to be replaced when the bristles reach approximately .59 inches (15mm height.)
	Need to use a different kind of brush/pad	Use a different kind of brush. For cleaning operations on floors where the dirt proves to be particularly resistant, we recommend using special brushes. See Accessories page.
The squeegee does not dry the floor	The squeegee is dirty.	Clean the squeegee.
	Recovery drain hose is not closed.	Close the drain plug.
	The suction hoses need to be cleaned.	Clean the vacuum hoses. See “Routine Maintenance” section.
	The squeegee blades are worn.	Replace/ or rotate the squeegee blades. See “Routine Maintenance” section.
	The recovery tank is full.	Drain recovery tank.
The vacuum motor does not function	The squeegee up/down switch in not in the low or middle position.	Put the squeegee in the low or middle position or reprogram “one touch”.
The machine does not start	The operator is not properly seated.	The operator must be properly seated in the driving position.
	The key is not in the “ON position”.	Turn the key to the “ON” position.
	The charger is still connected.	Remove the A/C cord from the wall.
	The batteries are not charged or not connected properly.	Check to make sure the batteries are connected properly and charge if necessary.
	The circuit breaker has tripped.	Reset the circuit breaker.
The brush motors do not work WARNING: To avoid damage to the floor, the motor starts only when the machine is traversing.	The brush head unit is not down.	Put the brush head unit down.
	The batteries are not charged or not connected properly.	Check to make sure the batteries are connected properly and charge if necessary.
	Poor electrical connection at the brush head unit.	Connect the electrical connection at the brush head unit.

FOCUS Rider Scrubber
Common Error Codes

ERROR CODE	CAUSE	ACTION
1500 1501 1507	Check brake and wiring for short circuit.	Make sure manual override is not engaged.
1600	High battery voltage.	Poor or corroded connection to the battery.
3100 3101 3102 3103 3104 3105	Probable short circuit of output device.	Check the traction, brush and vac motor connections on the trio and check wiring from these connectors down to the traction, brush and vac motors.
7600	Open circuit on brush motors or brush motor wiring.	Check the brush motor connection on the trio and check the wiring from this connector down to the brush motor.
7603	Possible short circuit on brush motors or wiring.	
7700	Open circuit on vacuum motor	Check connector to trio and vacuum motor
7800	Open circuit on traction motor.	Check the traction motor connection on trio and wiring down to motor.
7802	Traction motor current has exceeded current limit for the fold back time.	Excessive driving up an incline, or machine driven up against an obstacle or step.
9000	Brushes not fitted.	Place brushes or pads onto machine.
2F01	Drive system activated prior to turning key switch "ON".	Release traverse switch and reactivate.

BRUSHES AND PAD DRIVERS

28" Disc Model	
PART NO.	**DESCRIPTION**
17521C	Pad Driver Assembly (2 req.)
10383A	Lite Grit Disc Brush (2 req.)
11431B	Clean Grit Abrasive (2 req.)
11426B	Supergrit (2 req.)
11427B	Polypropylene (2 req.)
10874A	Nylon (2 req.)
34" Disc Model	
PART NO.	**DESCRIPTION**
17520C	Pad Driver Assembly (2 req.)
10384A	Lite Grit Disc Brush (2 req.)
11430B	Clean Grit Abrasive (2 req.)
11425B	Supergrit (2 req.)
11424B	Polypropylene (2 req.)
10875A	Nylon (2 req.)
28" Cylindrical Model	
PART NO.	**DESCRIPTION**
30614A	Polypropylene (2 req.)
30615A	Nylon (2 req.)
30616A	Clean Grit Abrasive (2 req.)
30617A	Supergrit (2 req.)
30619A	Lite Grit (2 req.)
32" BOOST Model	
PART NO.	**DESCRIPTION**
997004	Pads, Red 14 x 32 (5 Pack)
997003	Pads, Black 14 x 32 (5 Pack)
997005	Pads, White 14 x 32 (5 Pack)
997007	Pads, Blue 14 x 32 (5 Pack)

SQUEEGEE BLADES

28" Disc Model	
PART NO.	**DESCRIPTION**
30556A	Rear Squeegee, Back Gum Rubber Blade
30067L	Rear Squeegee, Back Linatex Blade
30066A	Rear Squeegee, Front Ribbed Urethane Blade
30540A	Side Squeegee, Back Gum Rubber Blade
30540L	Side Squeegee, Back Linatex Blade
30541A	Side Squeegee, Front Ribbed Urethane Blade
34" Disc Model & 28" Cylindrical Model	
PART NO.	**DESCRIPTION**
30557A	Rear Squeegee, Back Gum Rubber Blade
30069L	Rear Squeegee, Back Linatex Blade
30091A	Rear Squeegee, Front Ribbed Urethane Blade
30540A	Side Squeegee, Back Gum Rubber Blade
30540L	Side Squeegee, Back Linatex Blade
30541A	Side Squeegee, Front Ribbed Urethane Blade
32" BOOST Model	
PART NO.	**DESCRIPTION**
30773L2	Inner Blade, Linatex 3/16
38727A	Inner Blade, Urethane Ribbed
30774A	Outer Blade, Gum Rubber
30774L	Outer Blade, Linatex 3/16

FIELD INSTALLED OPTION KITS

PART NO.	DESCRIPTION
10880A	ESP - Extra Scrub Productivity, Recycling
10881A	Off Aisle Spray Tool and Vac Wand (includes pump)
10876A	Solution and Recovery Tank Level Indicator Lights
10877A	Caution Strobe Light (Amber)
10878A	Deluxe Seat
10879A	Head Light
53390A	CBMS - Clarke Battery Maintenance System

Clarke®

FOCUS

Rider Scrubber

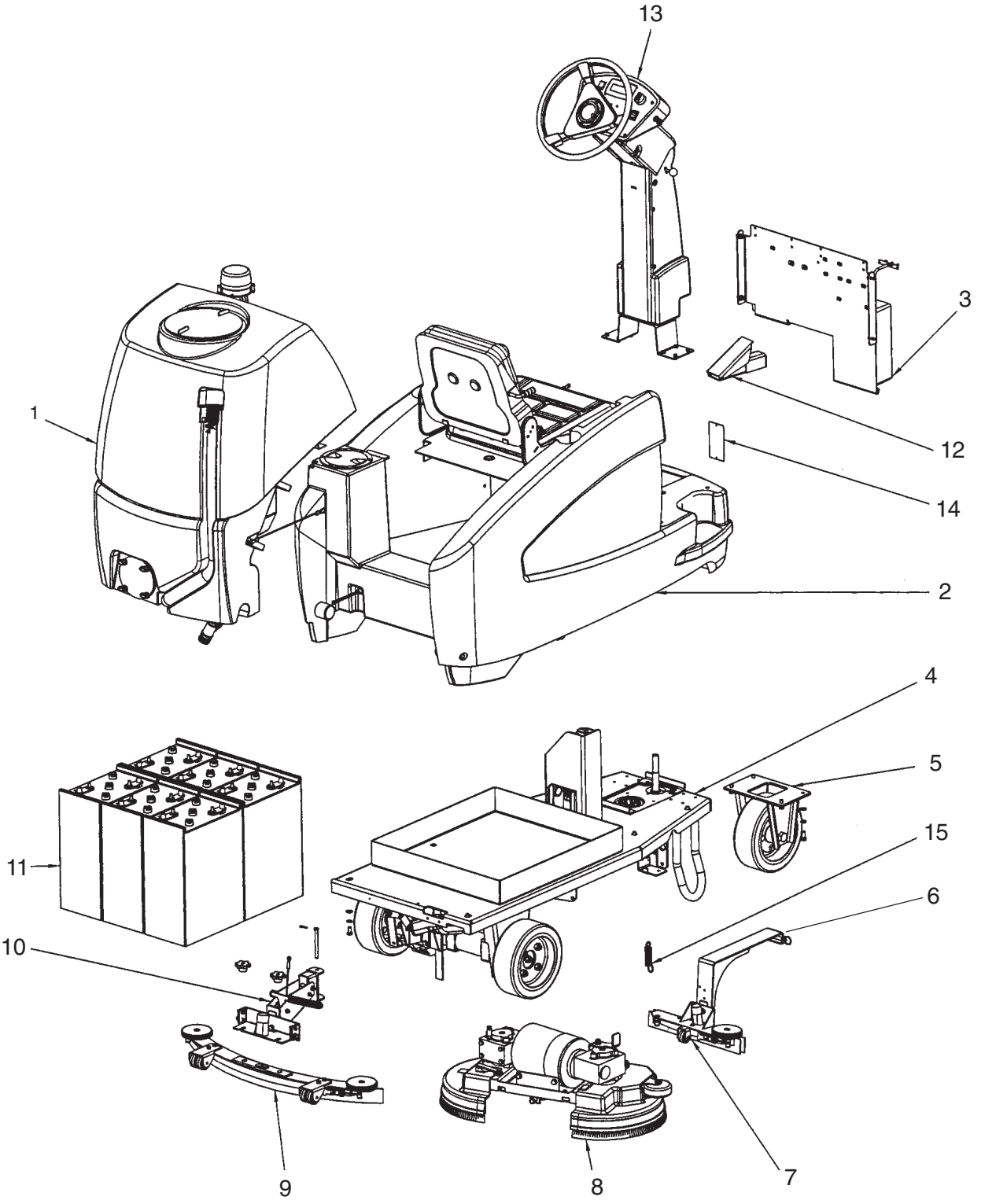
Section II

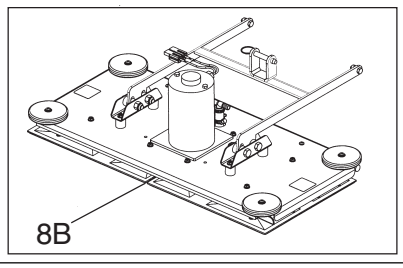
Parts and Service Manual

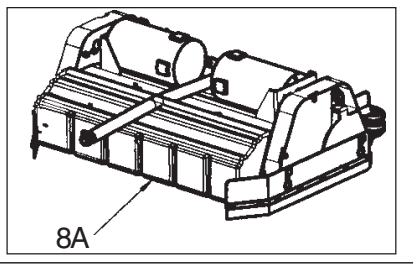
(71171A)

U.S. Patent No. 6,105,192; No. 6,493,896; No. 6,557,207; No. 7,041,029 and Patents Pending
Canada Patent No. 2,353,279 (Deluxe Machines)

Clarke®
FOCUS Rider Scrubber
Final Assembly Drawing 8/06





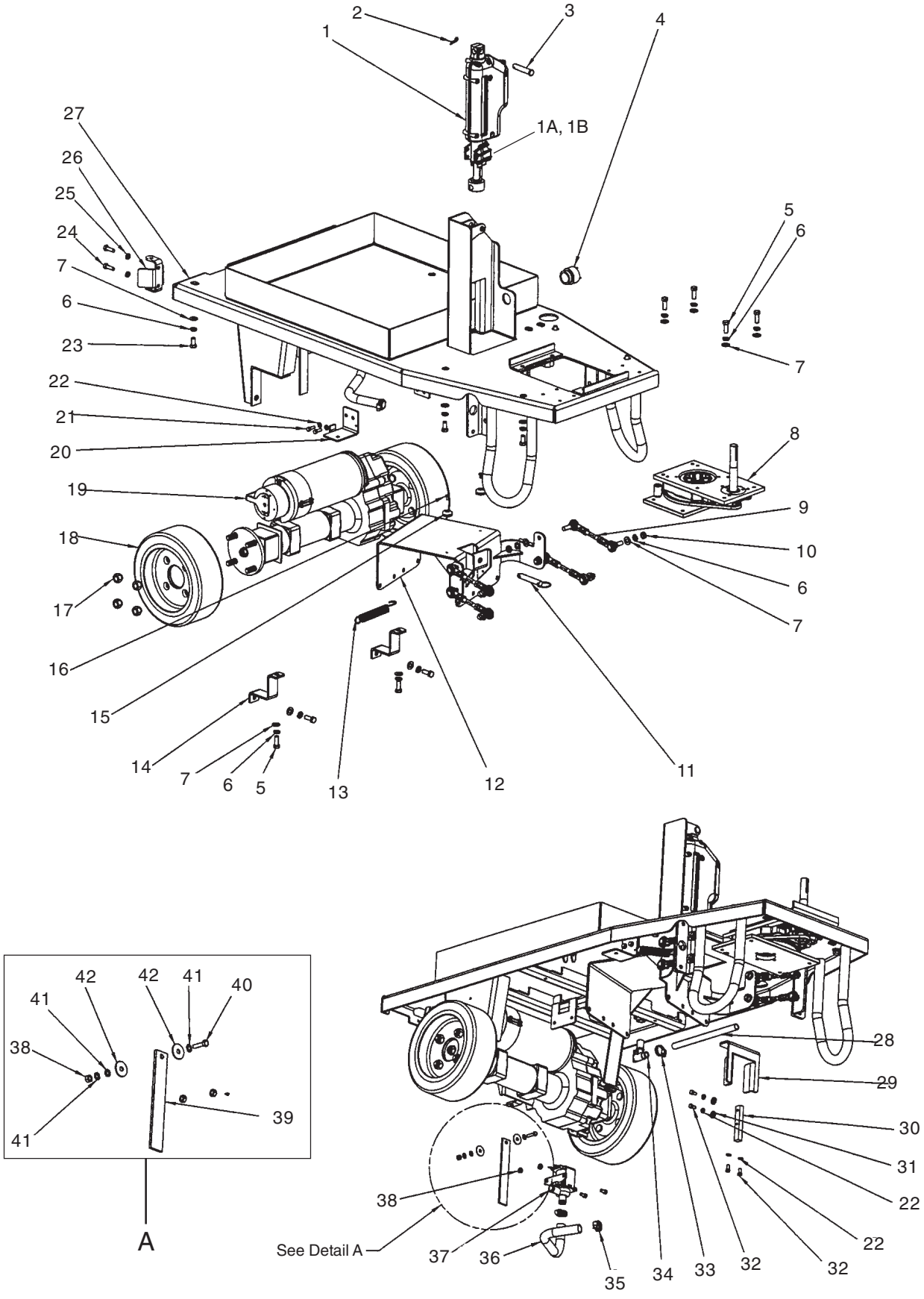


Clarke®
FOCUS Rider Scrubber
Final Assembly Parts List 8/06

Ref	Part No.	Description	Qty Rotary	Qty Cyl.	Qty. Boost
1	10783A	Tank, Recovery (Assembly)	1	-	-
	10990A	Tank, Recovery (Assembly)	-	1	1
2	11099A	Tank, Solution (Assembly)	-	-	1
	10784A	Tank, Solution (Assembly)	1	1	-
3	10782S	Plate, Electrical (28")	1	-	-
	10961A	Plate, Electrical (34")	1	-	-
	10989A	Plate, Electrical (Cyl.)	-	1	-
	11091A	Panel, Electrical (Boost)	-	-	1
4	11098A	Mainframe, Main Asm. (Rotary)	1	-	-
	11107A	Mainframe, Main Asm. (Boost)	-	-	1
	10949S	Mainframe, Main Asm. (Cyl.)	-	1	-
5	10779A	Wheel, Front Steering	1	1	1
6	10696A	Arm, Sec. Squeegee Lift	1	-	-
7	10694A	Squeegee, Secondary	1	-	-
8	10697A	Assembly, 28" Rotary Brush Head	1	-	-
	10698A	Assembly, 34" Rotary Brush Head	1	-	-
8A	10962A	Assembly, 28" Cyl. Brush Head	-	1	-
8B	11103A	Assembly, 32" Boost Head	-	-	1
9	10802A	Assembly, Squeegee 32"	1	-	-
	11041L	Assembly, Squeegee 39"	-	1	1
10	10787A	Arm, Rear Squeegee Lift	1	1	1
11	40704A	Pack, Battery 370 A.H.	1	1	1
12	53767A	Pedal, Accelerator	1	1	1
13	11087A	Column, Steering Asm.	1	1	1
14	70079A	Plate, Warning	1	-	1
15	818381	Spring Extension	1	-	-
NI	40895A	Positive Cable	1	1	1
NI	40896A	Negative Cable	1	1	1
NI	40882A	Cable Fuse	1	1	1
NI	41217A	Cable, Series	4	4	4

NI= Not illustrated

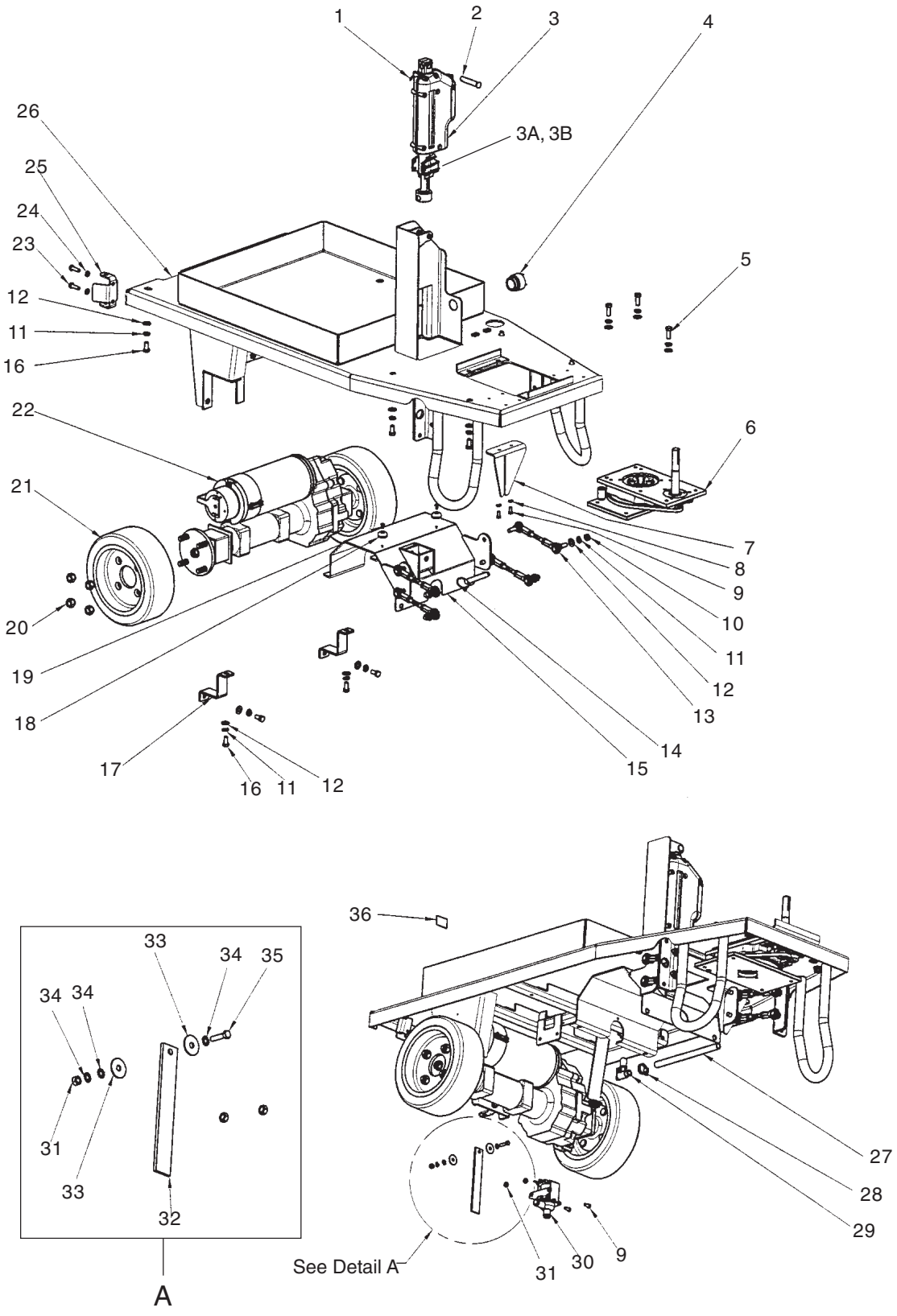
Clarke®
FOCUS Rider Scrubber
Main Frame Assembly Drawing (Rotary) 8/06
Drawing #11098A



Clarke®
FOCUS Rider Scrubber
Main Frame Assembly Parts List (Rotary) 8/06
Drawing # 11098A

Ref	Part No.	Description	Qty
1	53386B	Actuator, Head Lift	1
1A	40910A	Potentiometer & Circuit Borad	1
1B	40866A	Housing Potentiometer	1
2	766780	Pin, Hair	1
3	82501A	Pin, Clevis	1
4	40889A	Horn	1
5	962288	Bolt, 3/8-16 x 1 Hex Hd	8
6	170883	Washer, Lock 3/8”	22
7	980645	Washer, 3/8” S.A.E. Flat	22
8	53760A	Steering Asm. , Manual	1
9	61473A	Linkage, Rod	4
10	920204	Nut, 3/8-24 Hex Jam	8
11	53493A	Pin, Quick Release Act. Btm.	1
12	61482A	Weldment, Head Carriage	1
13	818381	Spring, Idler Tension	1
14	61475A	Clamp, Transaxle	2
15	51609A	Bumper, Rear	2
16	962929	Screw, 10-32 x 3/8”	2
17	81221A	Nut, 1/2-20 Lug	8
18	61382A	Wheel, Anti-Skid	2
19	40868A	Transaxle	1
20	61572A	Mount, Front Squeegee	1
21	962086	Screw, 1/4-20 x 3/4 Hex Hd.	2
22	980657	Washer, Lock 1/4	6
23	962244	Bolt, 3/8-16 x .75 Hex	6
24	85813A	Screw, 5/16-18 x 1 Hex Hd.	2
25	980652	Washer, 5/16 Lock	2
26	61491A	Bracket, Squeegee Stop	1
27	61481A	Weldment, Mainframe	1
28	30453A	Hose, Clear Vinyl	1
29	61596A	Stop, Brush Head	1
30	30558A	Pad, Brush Carriage Stop	1
31	87026A	Washer, 1/4 Flat SS	2
32	85737A	Screw, 1/4-20 x 1/2 HHCS	6
33	50348A	Clamp, Hose	1
34	59614A	Valve, Battery Drain	1
35	722030	Clamp, Hose	2
36	30445A	Hose, Solution (Flex)	1
37	48703A	Valve, Electric	1
38	81104A	Nut, 1/4” Nylock	3
39	69639A	Strap, Static	1
40	85700A	Screw, 1/4-20 x 1 HHCS	1
41	980614	Washer, 1/4” Starlock Ext.	3
42	980205	Washer, .31 I.D. x 1.06 O.D.	2

Clarke®
FOCUS Rider Scrubber
Main Frame Assembly Drawing (Cylindrical) 8/06
Drawing #10949S



Clarke®
FOCUS Rider Scrubber
Main Frame Assembly Parts List (Cylindrical) 8/06
Drawing # 10949S

Ref	Part No.	Description	Qty
1	766780	Pin, Hair	1
2	82501A	Pin, Clevis	1
3	40771A	Actuator, Head Lift	1
3A	40910A	Potentiometer & Circuit Borad	1
3B	40866A	Housing Potentiometer	1
4	40889A	Horn	1
5	962288	Bolt, 3/8-16 x 1 Hex Hd.	3
6	53760A	Steering Asm, Manual	1
7	61736A	Bracket, Head Stop (Cyl.)	1
8	980657	Washer, Lock 1/4	2
9	85737A	Screw, 1/4-20 x 1.2 HHCS	4
10	920204	Nut, 3/8-24 Hex Jam	4
11	170883	Washer, Lock 3/8”	17
12	980645	Washer, 3/8” SAE Flat	17
13	61473A	Linkage, Rod	4
14	53493A	Pin, Quick Release Actuator Btm.	1
15	61718A	Carriage, Weldment	1
16	962244	Bolt, 3/8-16 x .75 Hex	10
17	61475A	Clamp, Transaxle	2
18	51609A	Bumper, Rear	2
19	962929	Screw, 10-32 x 3/8”	2
20	81221A	Nut, 1/2-20 Lug	8
21	61382A	Wheel, Anti-Skid	2
22	40868A	Transaxle	1
23	85813A	Screw, 5/16-18 x 1 Hex Hd.	2
24	980652	Washer, 5/16 Lock	2
25	61836A	Bracket, Squeegee Stop	1
26	61719A	Frame, Main Weldment	1
27	30453A	Hose, Clear Vinyl	1
28	50248A	Clamp, Hose	1
29	59614A	Valve, Battery Drain	1
30	48703A	Valve, Electric	1
31	81104A	Nut, 1/4” Nylock	3
32	69639A	Strap, Static	1
33	980205	Washer, .31 I.D. X 1.06 O.D.	2
34	980614	Washer, 1/4” Starlock, Ext.	3
35	85700A	Screw, 1/4-20 x 1 HHCS	1
36	413754	Grip, Solution Tank Clamp	1

Clarke®
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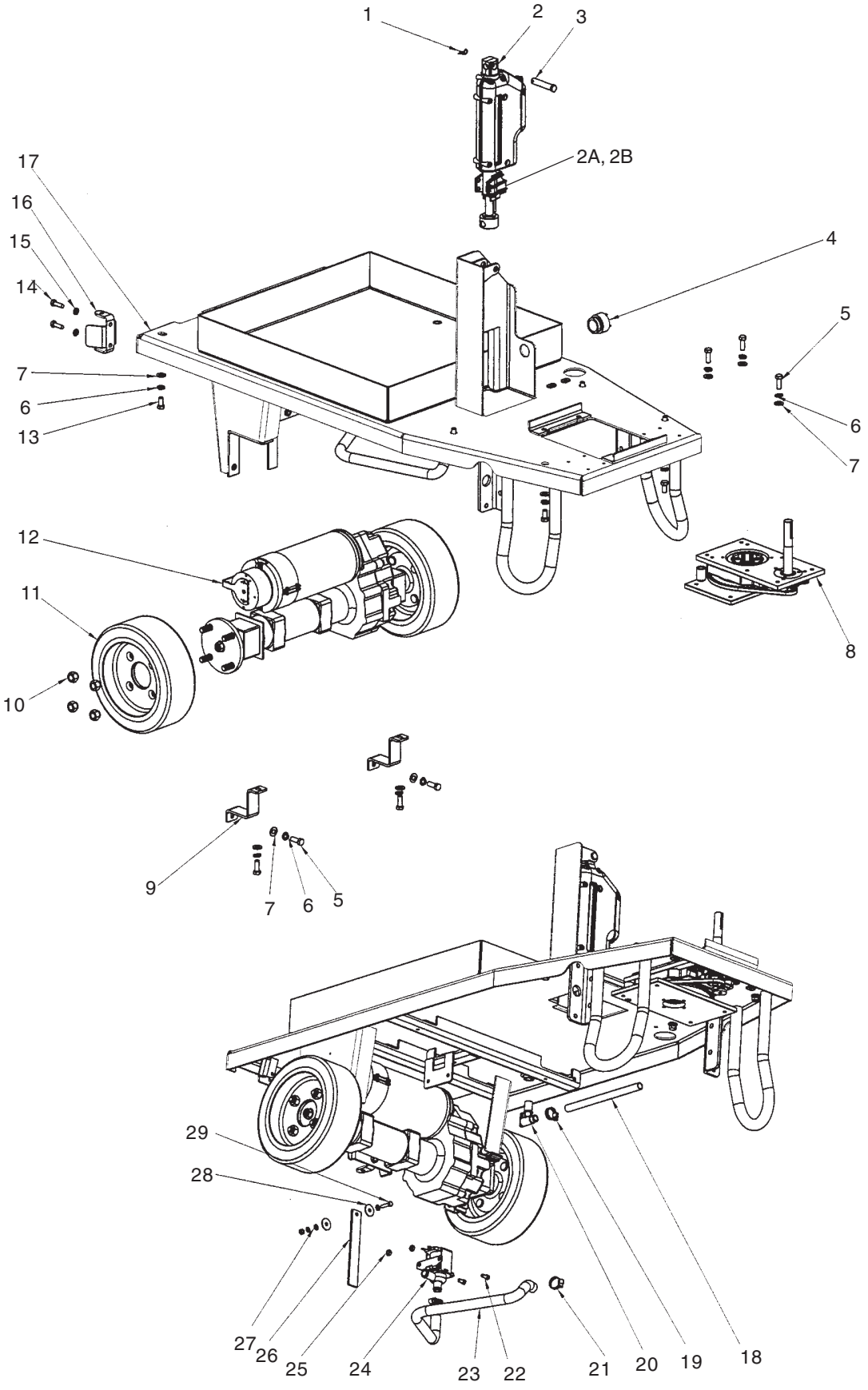
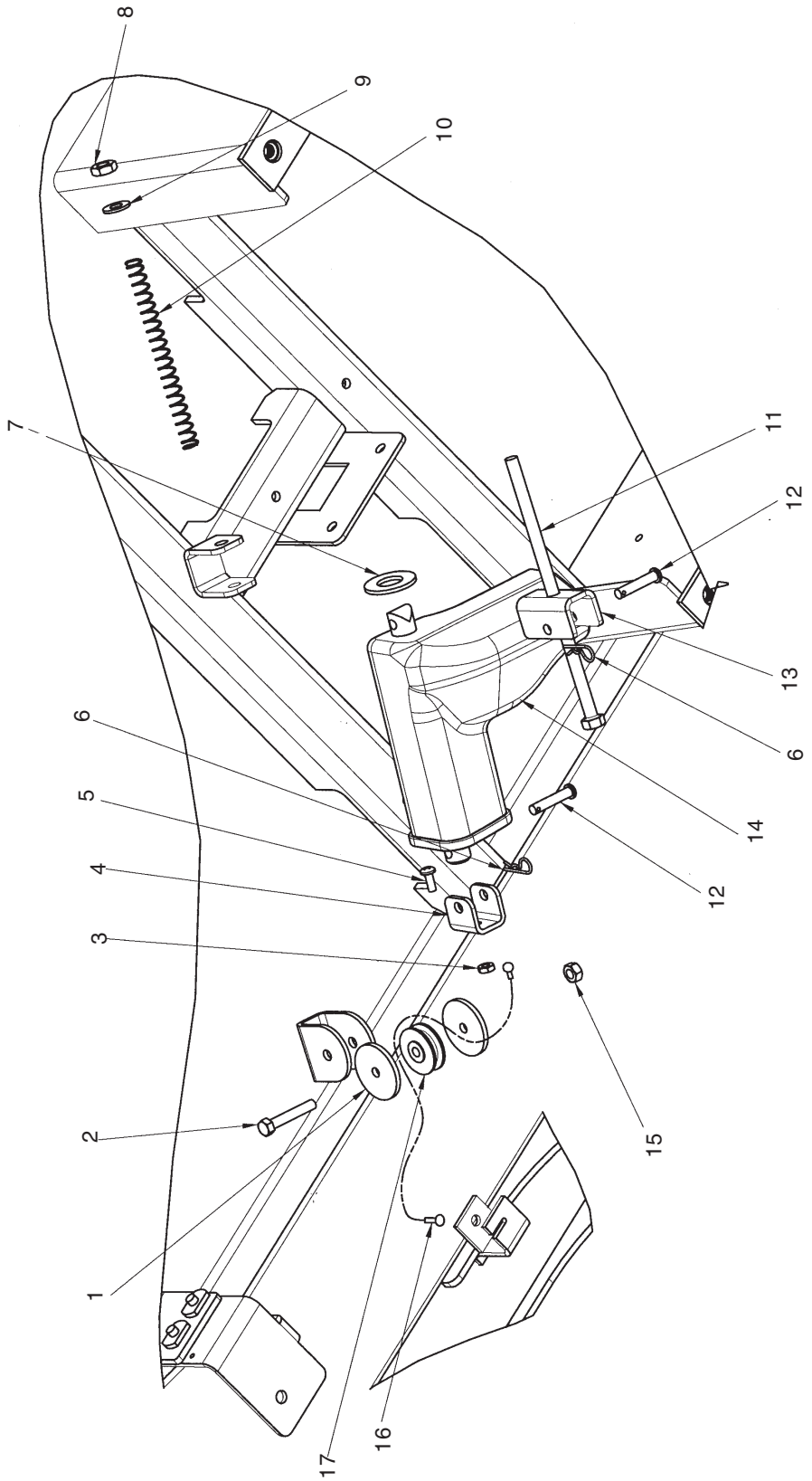
Main Frame Assembly Drawing (BOOST™) 8/06
Drawing #11107A



Clarke®
FOCUS Rider Scrubber
Main Frame Assembly Parts List (BOOST™) 8/06
Drawing # 11107A

Ref	Part No.	Description	Qty
1	766780	Pin, Hair	1
2	53874A	Actuator, Head Lift	1
2A	40910A	Potentiometer & Circuit Borad	1
2B	40866A	Housing Potentiometer	1
3	82501A	Pin, Clevis	1
4	40889A	Horn	1
5	962288	Bolt, 3/8-16 x 1 Hex Hd.	7
6	170883	Washer, Lock 3/8"	14
7	980645	Washer, 3/8" S.A.E. Flat	14
8	53760A	Steering Asm., Manual	1
9	61475A	Clamp, Transaxle	2
10	81221A	Nut, 1/2-20 Lug	8
11	61382A	Wheel, Anti-Skid	2
12	40868A	Transaxle	1
13	962244	Bolt, 3/8-16 x .75 Hex	7
14	85813A	Screw, 5/16-18 x 1 Hex Hd.	2
15	980652	Washer, 5/16 Lock	2
16	61836A	Bracket, Squeegee Stop	1
17	61719A	Frame, Main Weldment	1
18	30453A	Hose, Clear Vinyl	1
19	50248A	Clamp, Hose	1
20	59614A	Valve, Battery Drain	1
21	722030	Clamp, Hose	2
22	85737A	Screw, 1/4-20 x 1/2 HHCS	2
23	30680A	Hose, Solution (Flex)	1
24	48703A	Valve, Electric	1
25	81104A	Nut, 1/4" Nylock	3
26	69639A	Strap, Static	1
27	980614	Washer, 1/4" Starlock Ext.	3
28	980205	Washer, .31 I.D. x 1.06 O.D.	2
29	85700A	Screw, 1/4-20 x 1 HHCS	1

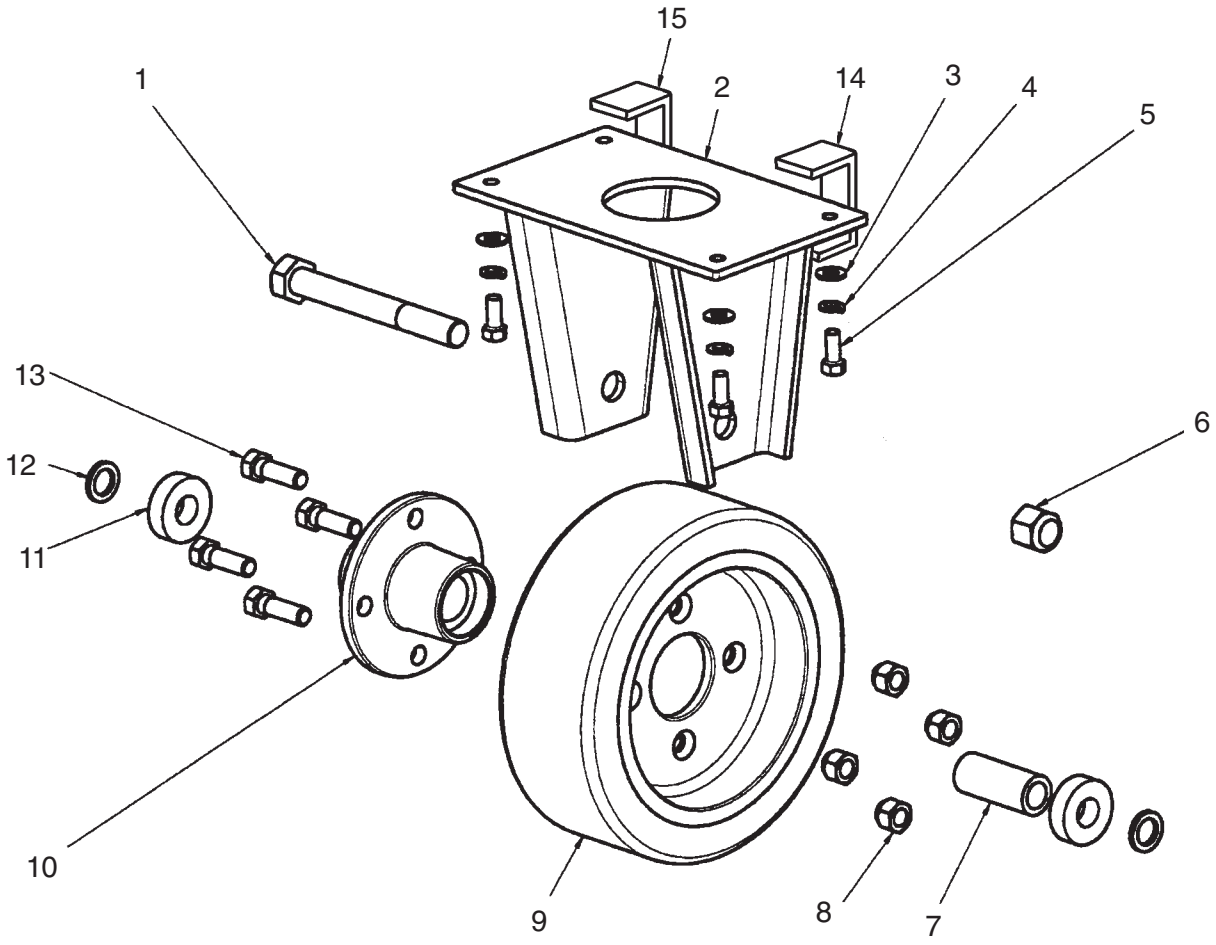
Clarke®
FOCUS Rider Scrubber
28” & 34” Rotarty Models
Optional Side Squeegee Lift Assembly Drawing 3/05



Clarke®
FOCUS Rider Scrubber
28" & 34" Rotarty Models
Optional Side Squeegee Lift Assembly Parts List 3/05

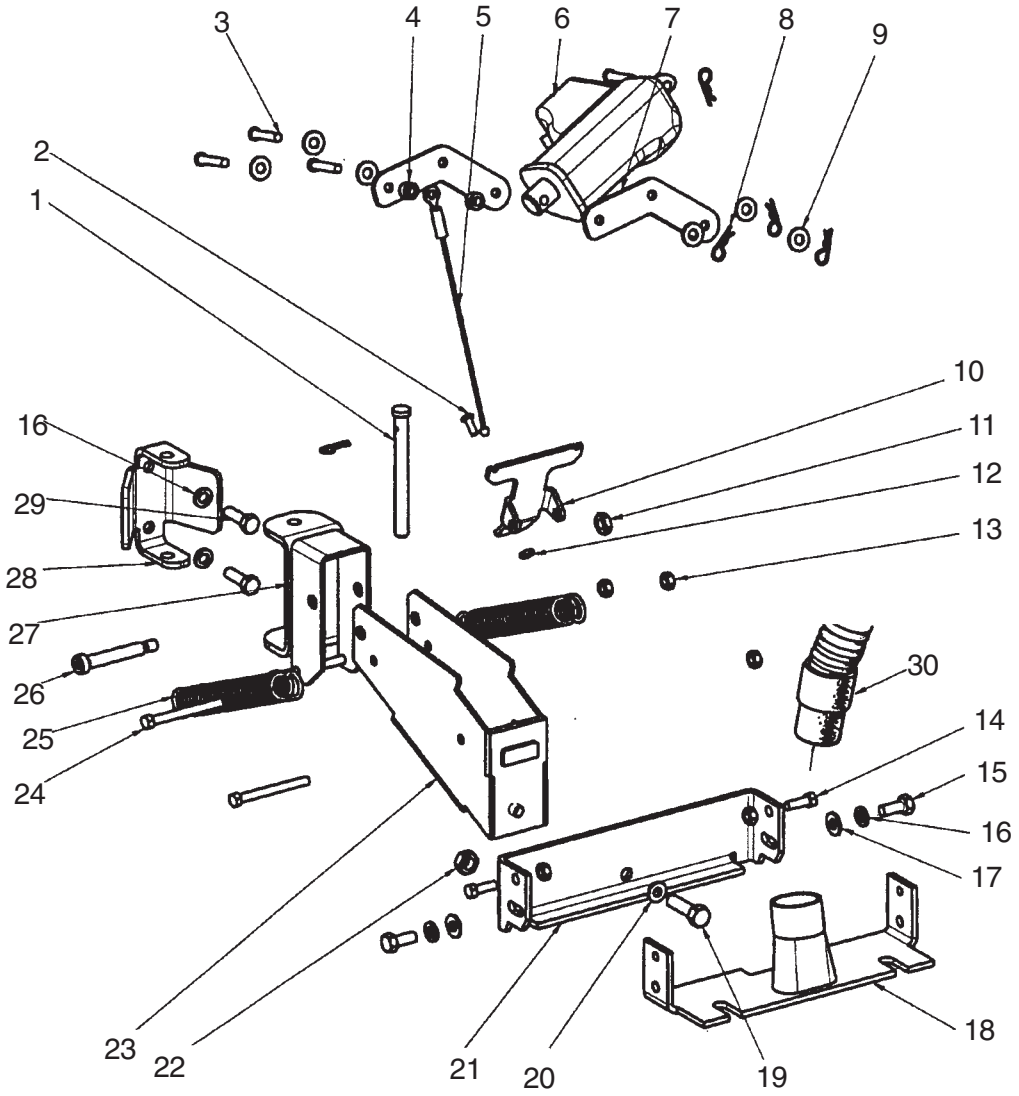
Ref	Part No.	Description	Qty
1	87624A	Washer, Nylon 1 1/2 x 1/4 x 1/8	2
2	86004A	Screw, 1/4-20 x 1.50 HHCS	1
3	920296	Nut, 10-24 Elastic Stop	1
4	61699A	Bracket, Sq. Lift Cable	1
5	962798	Screw, 10-24 x 1/2 PH	1
6	836711	Pin, Hair	2
7	80152A	Washer, Flat 5/8	1
8	920110	Nut, 5/16-18 Hex Lock	1
9	980651	Washer, 5/16 Flat	1
10	80286A	Spring, Actuator	1
11	80287A	Screw, 5/16-18 x 7 Hex Head	1
12	80273A	Pin, Clevis	2
13	61698A	Bracket, Actuator Rear Mount	1
14	40751A	Actuator, 3" Stroke	1
15	81104A	Nut, 1/4" Nylock	1
16	61695A	Cable, Squeegee Lift	1
17	57275A	Pulley, Cable	1

Clarke®
FOCUS Rider Scrubber
Front Wheel Assembly Drawing and Parts List 8/06
Drawing #10779A



Ref	Part No.	Description	Qty
1	80267A	Bolt, 3/4 - 16 Hex Head	1
2	61472A	Yoke Weldment, Steering	1
3	980645	Washer, 3/8 Flat	4
4	170883	Washer, Lock 3/8	4
5	85822A	Screw, 3/8 -16 x 7/8 Hex Hd.	4
6	80268A	Nut, .750 ESNA	1
7	61483A	Spacer, Center	1
8	81221A	Nut, 1/2 -20 Lug	4
9	61382A	Wheel, Anti-Skid	1
10	61474A	Hub, Front Wheel	1
11	53437A	Bearing	2
12	61484A	Spacer, Outside	2
13	85838A	Bolt, 1/2 -20 Hex	4
14	61877A	Stop, LH Steering	1
15	61878A	Stop, RH Steering	1

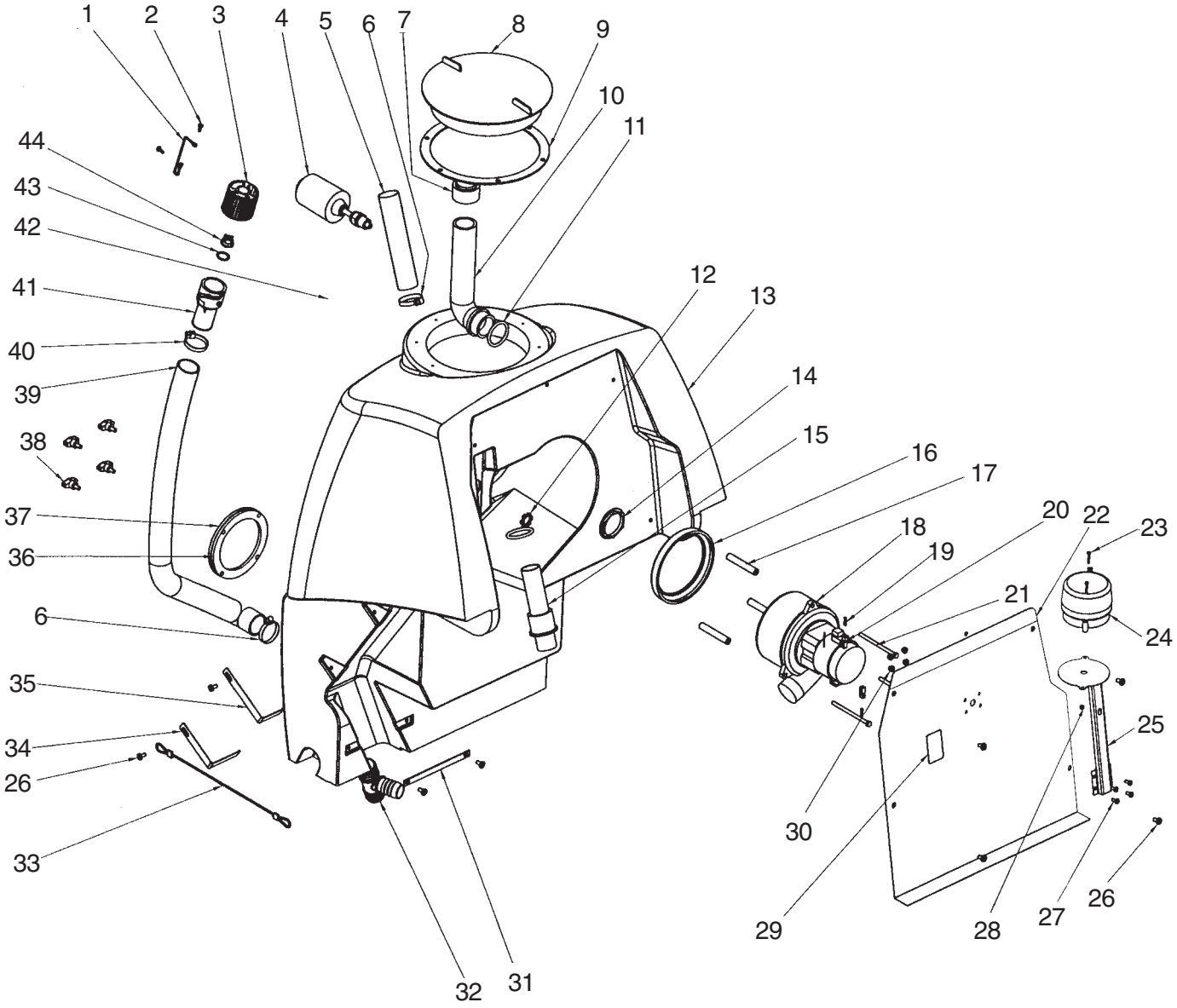
Clarke®
FOCUS Rider Scrubber
Squeegee Lift Assembly Drawing and Parts List 4/06
Drawing #10787A / 10949A



Ref	Part No.	Description	Qty
1	66531A	Pin, Swing Arm	1
2	962798	Screw, 10-24 x 1/2 PH	1
3	80273A	Pin, Clevis	4
4	30542A	Spacer	2
5	61549A	Cable, Rear Squeegee	1
6	53387A	Actuator, Squeegee	1
7	53446A	Lever, Pivot, Squeegee	2
8	836711	Pin, Hair	5
9	87026A	Washer, 1/4 Flat SS	6
10	61552A	Lever, Spring	1
11	920110	Nut, 5/16-18 Hex Lock	1
12	920296	Nut, 10-24 Elastic Stop	1
13	81104A	Nut, 1/4 Nylock	5
14	170915	Screw, 1/4 - 20 x 3/4 Hex HD	2
15	962620	Screw, 5/16 - 24 x 3/4 Hex HD	2

Ref	Part No.	Description	Qty
16	980652	Washer, 5/16 Lock	4
17	980651	Washer, 5/16 Flat	2
18	61267A	Tube, Bracket Squeegee	1
19	85730A	Screw, 3/8 - 16 x 1 1/4 Hex HD	1
20	87031A	Washer, 3/8 Flat SS	1
21	60678C	Bracket, Squeegee Mount	11
22	81105A	Nut, 3/8 - 16 SS ESNA	1
23	61551A	Arm, Rear Weldment	1
24	962269	Screw, 1/4 - 20 x 2 1/2 Hex HD	2
25	53423a	Spring, Extension 5,19”	2
26	80015A	Screw, 3/8 -16 x 2	2
27	61550A	Mount, Front Arm	1
28	61491A	Bracket, Squeegee Mount (Rotary)	1
	61736A	Bracket, Squeegee Mount (Cylindrical)	1
29	85813A	Screw, 5/16 - 18 x 1 Hex HD	2
30	30568A	Hose, Recovery	1

Clarke®
FOCUS Rider Scrubber
Recovery Tank Assembly Drawing 5/05
Drawing #10783A / 10990A



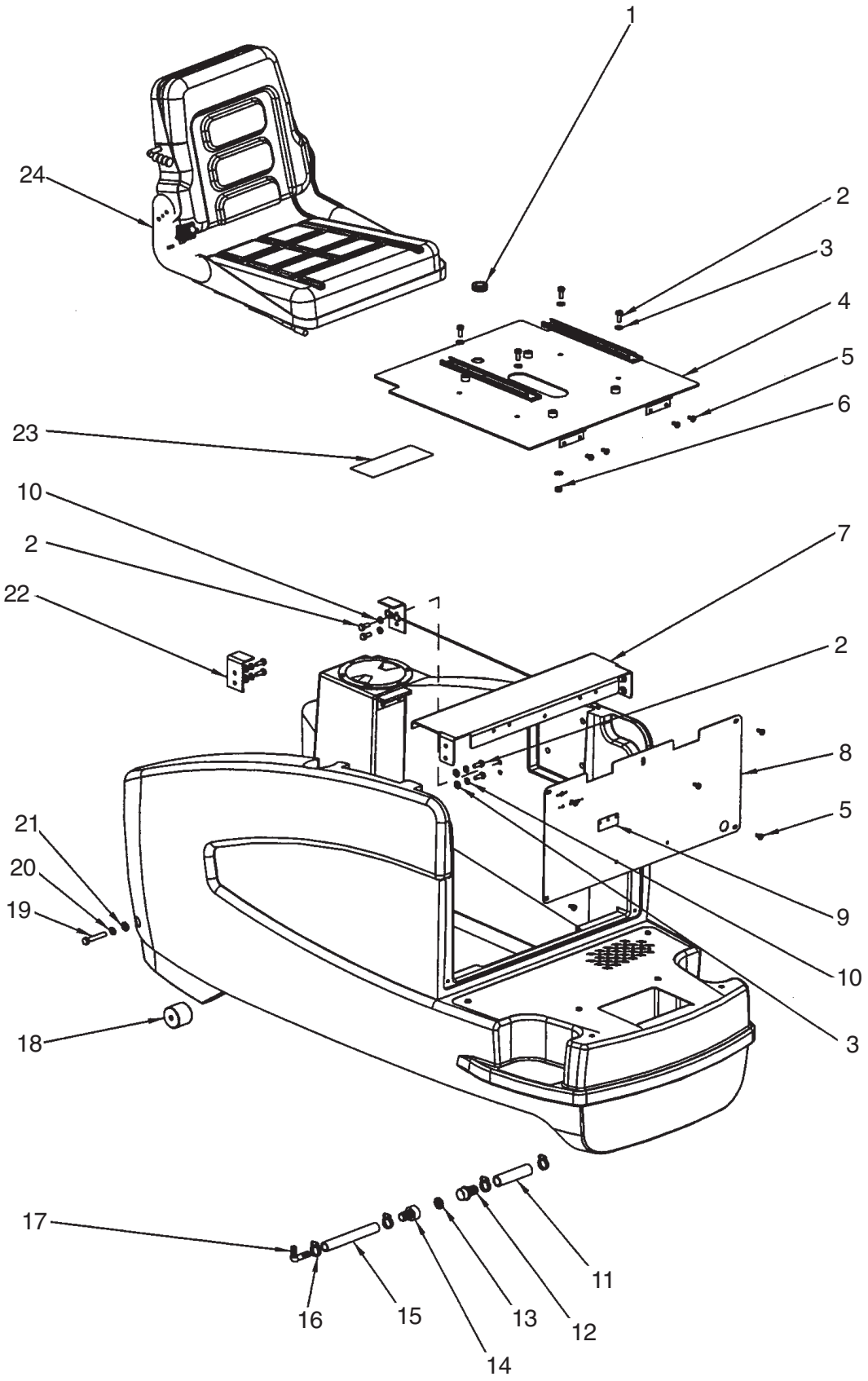
Clarke®
FOCUS Rider Scrubber
Recovery Tank Assembly Parts List 5/05
Drawing # 10783A / 10990A

Ref	Part No.	Description	Qty
1	52206A	Chain, Drain Asm.	1
2	962957	Screw, 10 -16 x 1/2 Self Tab	2
3	30227A	Housing, Drain	1
4	40002A	Switch, Float Electrical	1
5	30622A	Hose, Vac Exhaust	1
6	752020	Clamp, Hose	1
7	58069A	Screen, Vac Filter	1
8	30581A	Lid, Recovery Tank	1
9	30582A	Gasket, Rec. Tank Lid	1
10	39339B	Tube, Stand 90°	1
11	837304	O-Ring, Retainer	2
12	82100A	Locknut, 1/2	1
13	30531A	Tank, Recovery	1
14	920797	Nut, Drain Valve	1
15	30623A	Tube, Stand Straight	1
16	643418	Gasket, Vac Unit	1
17	58533A	Spacer, Vac Motor	3
18	45019A	Motor, Vac`	1
19	41809A	Contact, Housing Connector	2
20	43401A	Housing, Connector	2
21	85728A	Screw, 1/4 - 20 x 4 Hex HD	3
22	61565A	Panel, Recovery Vac Motor	1
23*	962212	Screw, 6-32 x 7/8 PH	2
24*	40874A	Light, Strobe	1
25*	61579A	Bracket, Strobe Light	1
26	85395A	Screw, 1/4 - 20 x 1/2 PH	8
27*	84237A	Screw, 10-32 x .50 PH	4
28	920056	Nut, 6-32 ESNA Nylock	2
29	77093A	Label	1
30*	920722	Nut, 10-32 ESNA	4
31	61478A	Retainer, Lower Hose	1
32	30561A	Coupler, Hose (Rotary Machine)	1
	682408	Connector, Hose (Cyl. & BOOST)	1
33	61573A	Cable, Recovery Tank	1
34	61498A	Retainer, Mid Hose	1
35	61477A	Retainer, Upper Hose	1
36*	30559A	Gasket, Clean Out	1
37*	61566A	Clean-Out, Drain	1
38*	52477A	Knob, 1/4 - 20 Clamp	4
39	30443A	Hose, Recovery	1
40	832002	Clamp, Hose	2
41	30225A	Body, Drain Valve	1
42*	40876A	Sensor, Water Level	1
43	52560A	O-Ring, .103 x 7.99 ID	1
44	30226A	Plug, Drain	1
NI	30568A	Hose, Squeegee	1
NI	30567A	Hose, Vac	1

NOTE: * Optional accessories

NI = Not illustrated

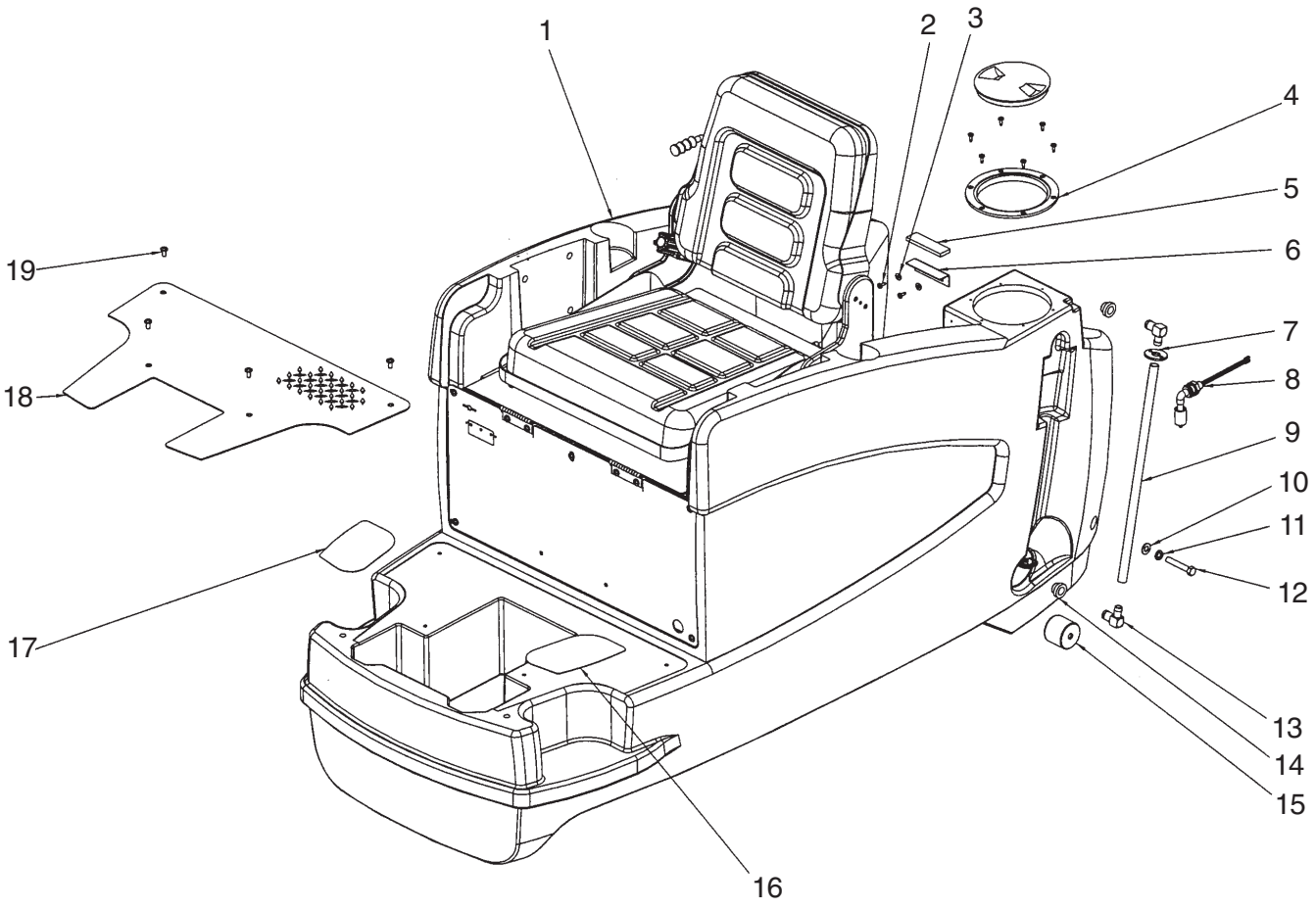
Clarke®
FOCUS Rider Scrubber
Solution Tank Assembly Drawing (View 1 of 2) 8/06
Drawing # 11099A



Clarke®
FOCUS Rider Scrubber
Solution Tank Assembly Parts List (View 1 of 2) 8/06
Drawing # 11099A

Ref	Part No.	Description	Qty
1	193944	Grommet	1
2	85811A	Screw, 5/16 - 18 x 3/4 Hex Head	12
3	980651	Washer, 5/16 Flat	13
4	61492B	Plate, Seat Assembly	1
5	85395A	Screw, 1/4-20 x 1/2 PH	9
6	81112A	Nut, 5/16 - 18 Thin ESNA	1
7	61490A	Mount, Seat Assembly	1
8	61489A	Plate, Cover	1
9	70883A	Label, Battery Charger	1
10	980652	Washer, 5/16 Lock	8
11	30566A	Hose, 5/8" ID x 7/8" OD x 4.00	1
12	830214	Adapter, 3/4 Barb & GHT Male	1
13	838517	Screen, Hose Washer	1
14	50358A	Adapter, 5/8 Barb Swivel	1
15	30445A	Hose, Solution (Flex)	1
16	53571A	Clamp, Hose	4
17	53498A	Fitting, 90d ELL Pipe	1
18	61561A	Pivot, Recovery Tank	1
19	85704A	Screw, 3/8-16 x 2 1/4" Hex	2
20	170883	Washer, Lock 3/8"	2
21	980645	Washer, 3/8" SAE Flat	2
22	61562A	Stop, Seat	2
23	70841A	Label, Battery Installation	1
24	30534A	Seat, Ergo/Adjustable (Option)	1
NI	61573B	Cable, Seat/Rec. Tank	1
NI	50248A	Clamp, Hose	1

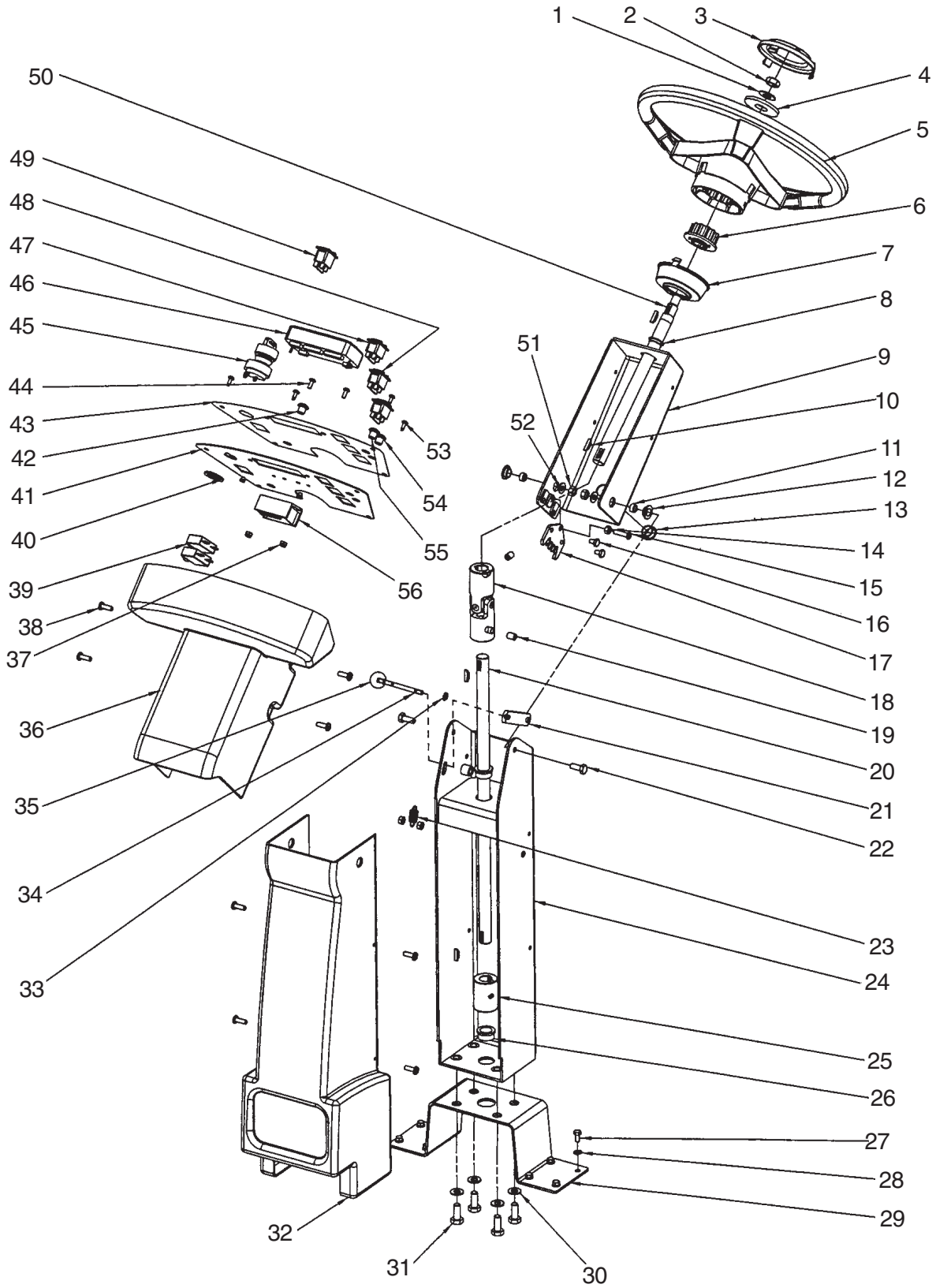
Clarke®
FOCUS Rider Scrubber
Solution Tank Assembly Drawing (View 2 of 2) 8/06
Drawing # 11099A



Clarke®
FOCUS Rider Scrubber
Solution Tank Assembly Parts List (View 2 of 2) 8/06
Drawing # 11099A

Ref	Part No.	Description	Qty
1	30530A	Tank, Solution	1
2	962957	Screw, 10-16 x 1/2 Self Tap	8
3	87036A	Washer, #10 Flat	2
4	30539B	Lid, Solution	1
5	30578A	Gasket, Solution Tank Fill	1
6	61574A	Bracket, Tank Fill Gasket	1
7	61563A	Washer, Sight Tube	1
8	40876A	Sensor, Water Level (Option)	1
9	30564A	Hose, Solution Sight	1
10	980645	Washer, 3/8" S.A.E. Flat	2
11	170883	Washer, Lock 3/8"	2
12	85704A	Screw, 3/8-16 x 2 1/4" Hex	2
13	55189A	Hosebarb, .50 x 90 degree	2
14	31242A	Bushing	2
15	61561A	Pivot, Recovery Tank	2
16	30597A	Pad, Solution Tank Step (Left)	1
17	30596A	Pad, Solution Tank Step (Right)	1
18	61843A	Plate, Deck	1
19	85398A	Screw, 1/4-20 x 1/2" P.H.	4

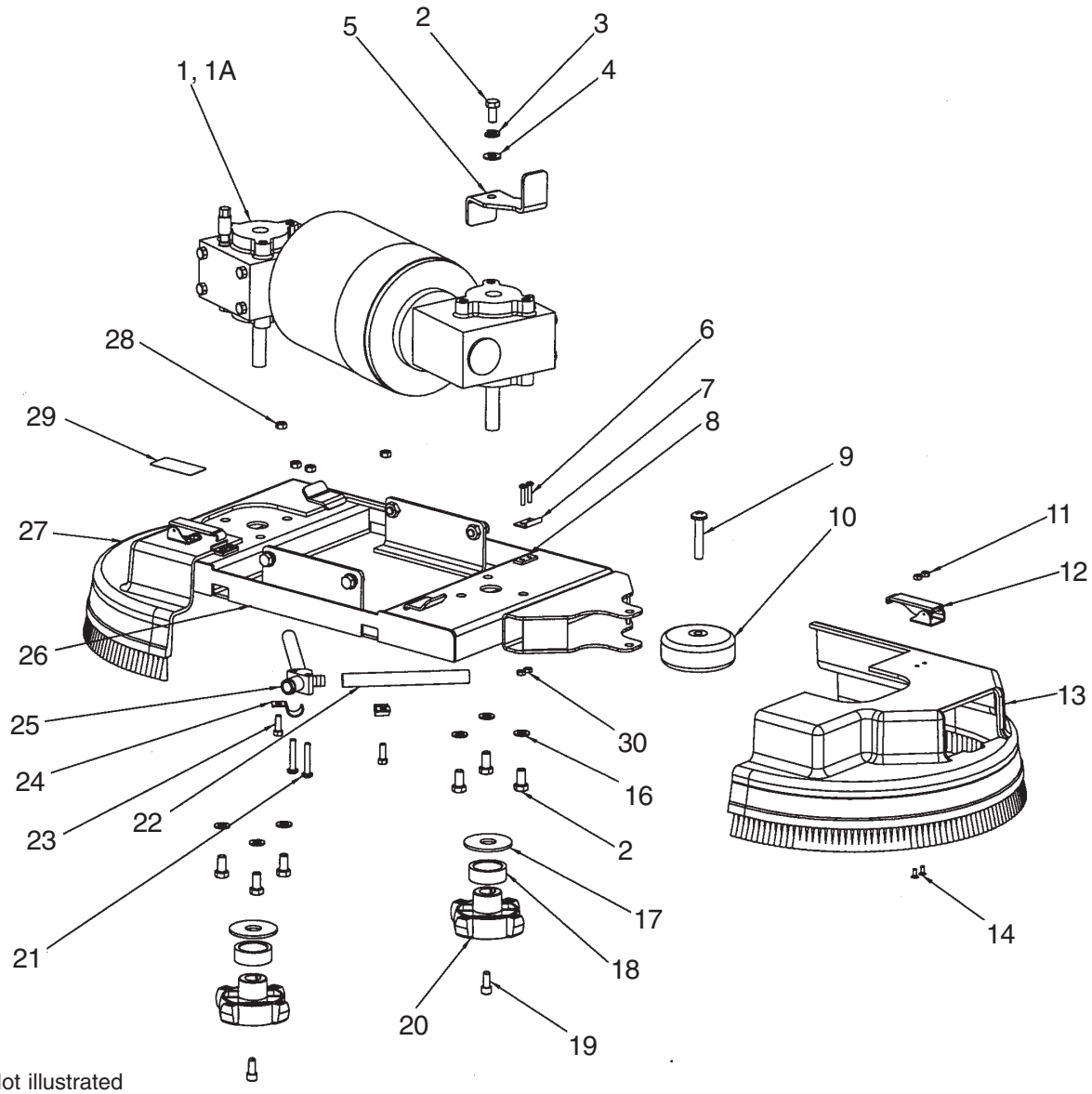
Clarke®
FOCUS Rider Scrubber
Steering Column Assembly Drawing 8/06
Drawing # 11087A



Clarke®
FOCUS Rider Scrubber
Steering Column Assembly Parts Lisst 8/06
Drawing # 11087A

Ref	Part No.	Description	Qty
1	980648	Washer, 17/32 x 1 1/16 Plain	1
2	424069	Nut, 1/2-13 Hex Nyloc	1
3	56497543	Cap, Steering Wheel	1
4	80328A	Washer, Flat	1
5	56497306	Wheel, Steering	1
6	56497560	Adapter, Wheel	1
7	56497308	Cup	1
8	56314148	Bearing, Nyliner	1
9	61848A	Column, Upper Steering	1
10	55400A	Key, 3/16 x 5/32	4
11	56320595	Bushing, .32 x .50 x .28	2
12	56413211	Spacer, Nylon	2
13	56900041	Plug, Cap	1
14	81104A	Nut, 1/4" Nylock	3
15	962495	Screw, 1/4-20 x 1 P.H.	1
16	85742A	Screw, 1/4-20	2
17	56413658	Plate, Column Tilt	1
18	56454081	Universal Joint	1
19	56001958	Screw, 3/8-16 x .25 Set	2
20	61838A	Shaft, Lower (Man. Steer)	1
21	56413661	Handle, Pivot Weldment	1
22	85812A	Screw, M10-1.5 x 30MM	2
23	56305072	Spring	1
24	61839A	Column, Lower Steering	1
25	53759A	Coupling, Sleeve (Man.)	1
26	56250414	Bearing, Flange	2
27	85737A	Screw, 1/4-20 x 1/2 HHCS	8
28	980657	Washer, Lock 1/4	8
29	61837A	Plate, Column Adapter	1
30	980645	Washer, 3/8" SAE Flat	4
31	80088A	Screw, M10-1.5 x 30MM	4
32	30734A	Cover, Front (Lower)	1
33	56003268	Retainer, 1/4" Shaft	1
34	56413664	Handle, Adjustment	1
35	56440817	Knob, Tilt Lock	1
36	30733A	Cover, Front (Upper)	1
37	920722	Nut, 10-32 ESNA	2
38	85387A	Screw, 1/4-16 x 3/4	8
39	41423B	Breaker, 5A Circuit, Cntrl/Act	2
40	40786S	Spacer, Key Switch	1
41	61835A	Panel, Control	1
42	40941A	Horn Button	1
43	71165A	Label, Control Panel	1
44	84237A	Screw, 10-32 x .50 P.H.	2
45	40786A	Switch, CE Key	1
46	40880A	Panel, LCD Control (TRIO)	1
47	40890A	Switch, Maintained Rocker	1
48	40885A	Switch, Momentary Rocker	2
49	49040A	Switch, Maintained Rocker	1
50	56420059	Shaft, Upper Steering	1
51	81112A	Nut, 5/16-18 Thin ESNA	2
52	980651	Washer, 5/16 Flat	2
53	962957	Screw, 10-16 x 1/2 Self Tap	4
54	40748A	Switch, Push Button	1
55	40706A	Switch, Momentary Push	1
56	40879A	Module, Solution Level (Option0	1

Clarke®
FOCUS Rider Scrubber
28" Rotary Brush Head Assembly Drawing and Parts List 8/05
Drawing #10697A

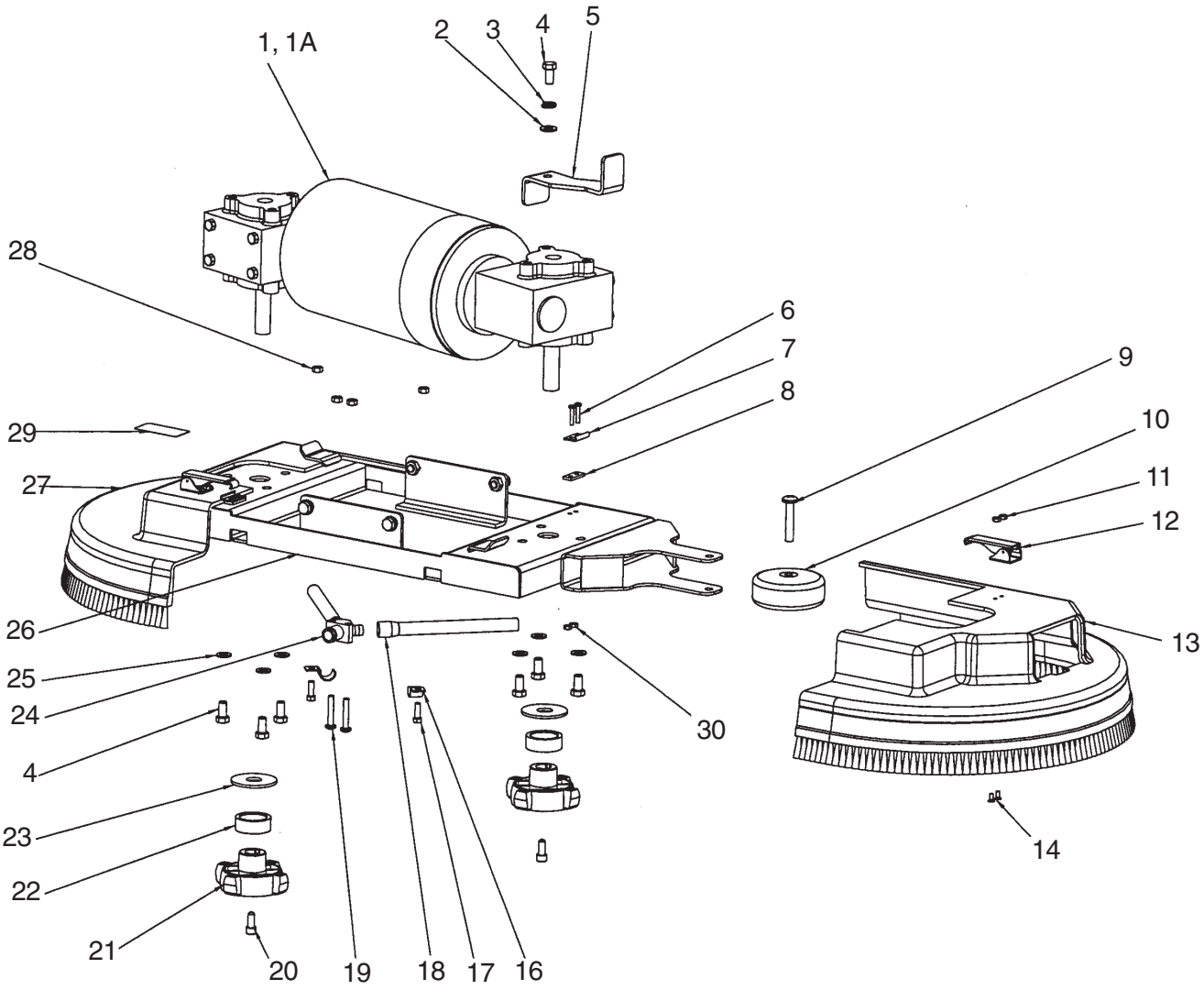


NI = Not illustrated

Ref	Part No.	Description	Qty
1	40904A	Motor, Dual Gear Box	1
1A	915102	Key	2
2	962244	Bolt, 3/8 - 16 x 3/4 Hex	12
3	170883	Washer, Lock 3/8	2
4	980645	Washer, 3/8 Flat	2
5	61722A	Plate, Auto Side Squeegee	1
	61497A	Plate, Manual Side Squeegee	1
6	85613A	Screw, 8 - 32 x 7/8 PH SS	4
7	55451A	Keeper, Latch	2
8	61570A	Spacer, Keeper	2
9	962803	Screw, 5/16-18 x 1 1/2 FH	1
10	53838A	Wheel, Guide 4"	1
11	920108	Nut, 8 - 32 ESNA SS	4
12	55721A	Latch, Brush Housing	2
13	30535A	Housing, 28" Brush Right Main	1
14	962030	Screw, 8 - 32 x 3/8" FHCS	4
16	980638	Washer, 3/8 Lock	10

Ref	Part No.	Description	Qty
17	59856A	Washer, Rubber	2
18	61658A	Collar, Brush Driver	2
19	962714	Screw, Gimbal Mount	2
20	34400B	Gimbal, Motor	2
21	962989	Screw, 1/4 - 20 x 1 1/2 PH	2
22	34705A	Hose, Solution	2
23	170915	Screw, 1/4 - 20 x 3/4 Hex HD	2
24	782002	Clamp, Manifold	2
25	38014A	Splitter, Solution	1
26	61546A	Frame, 28" Brush Motor	1
27	30536A	Housing, 28" Brush Left Main	1
28	81104A	Nut, 1/4 Nylock	4
29	77091A	Label, Moving Parts	1
30	81109A	Nut, 8-32 ESNA SS	4
NI	30536A	Housing, 28" Left Brush	1
NI	30535A	Housing, 28" Right Brush	1

Clarke®
FOCUS Rider Scrubber
34" Rotary Head Assembly Drawing and Parts List 8/05
Drawing #10698A

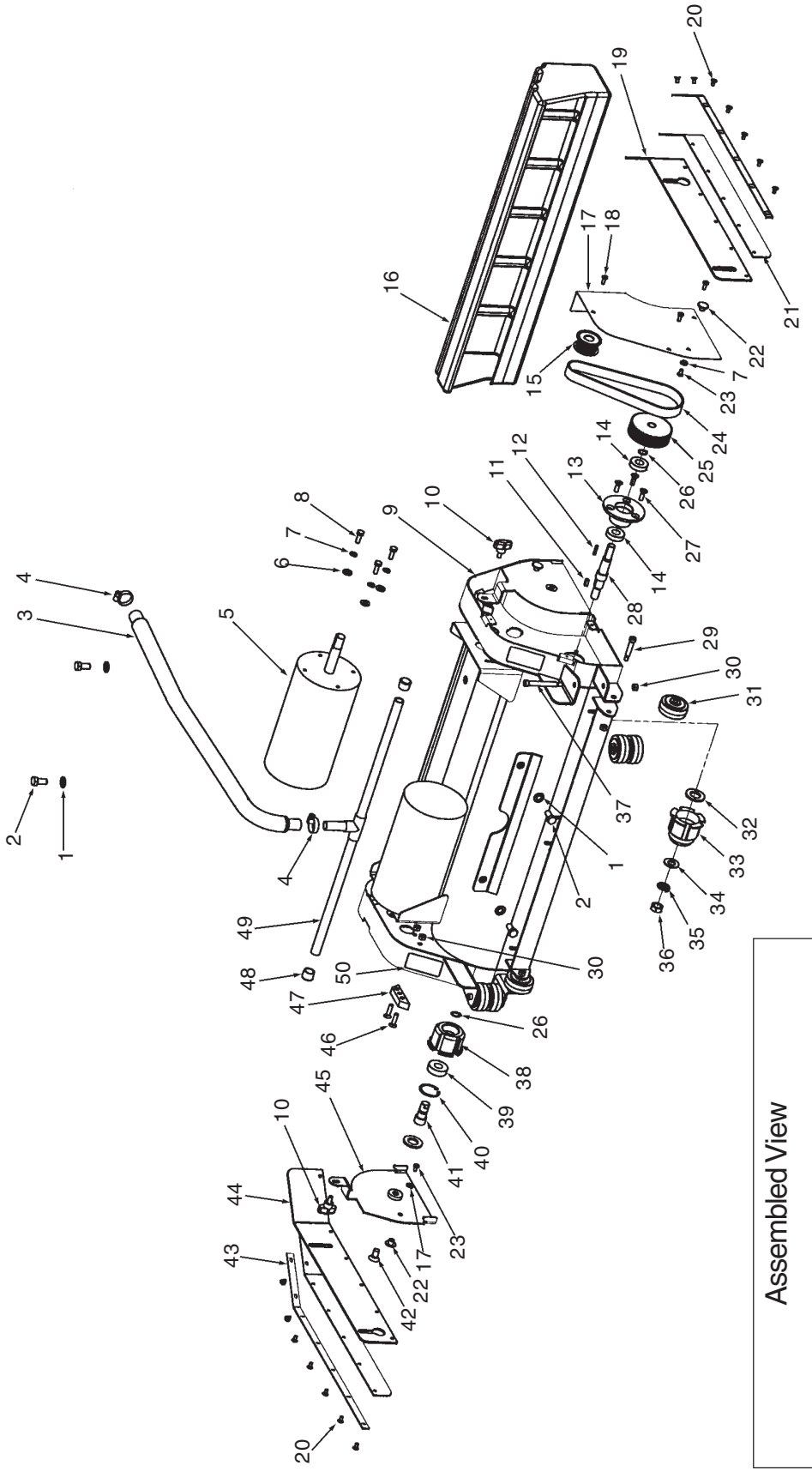


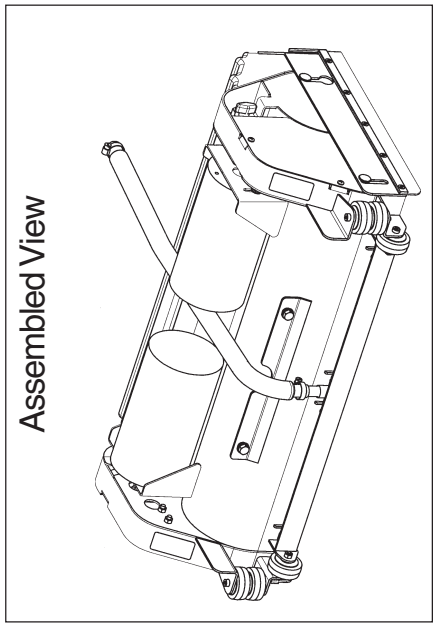
NI = Not illustrated

Ref	Part No.	Description	Qty
1	40905A	Motor, Dual Gear Box	1
1A	915902	Key	2
2	980645	Washer, 3/8 Flat	2
3	170883	Washer, 3/8 Lock	2
4	962244	Bolt, 3/8 - 16 x 3/4 Hex	11
5	61723A	Plate, Auto Side Squeegee	1
	61497A	Plate, Manual Side Squeegee	1
6	85613A	Screw, 8 - 32 x 7/8 PH SS	4
7	55451A	Keeper, Latch	2
8	61570A	Spacer, Keeper	2
9	962803	Screw, 5/16-18 x 1 1/2 FH	1
10	53838A	Wheel, Guide 4"	1
11	920108	Nut, 8 - 32	4
12	55721A	Latch, Brush Housing	2
13	30537A	Housing, 34" Brush Right Main	1
14	962030	Screw, 8 - 32 x 3/8" FHCS	4
16	782002	Clamp, Manifold	2

Ref	Part No.	Description	Qty
17	170915	Screw, 1/4 - 20 x 3/4 Hex HD	2
18	30210A	Tubing, Vinyl	1
19	962989	Screw, 1/4 - 20 x 1 1/2 PH	2
20	962714	Screw, Gimbal Mount	2
21	34400B	Gimbal, Motor	2
22	61658A	Collar, Brush Driver	2
23	59856A	Washer, Rubber	2
24	38014A	Splitter, Solution	1
25	980638	Washer, 3/8 Lock	10
26	61547B	Frame, 34" Brush Motor	1
27	30538A	Housing, 34" Brush Left Main	1
28	81104A	Nut, 1/4 Nylock	4
29	77091A	Label, Moving Parts	1
30	81109A	Nut, 8-32 ESNA SS	4
NI	30538A	Housing, 34" Left Brush	1
NI	30537A	Housing, 34" Right Brush	1

Clarke®
FOCUS Rider Scrubber
28” Cylindrical Head Assembly Drawing 3/05
Drawing #10962A

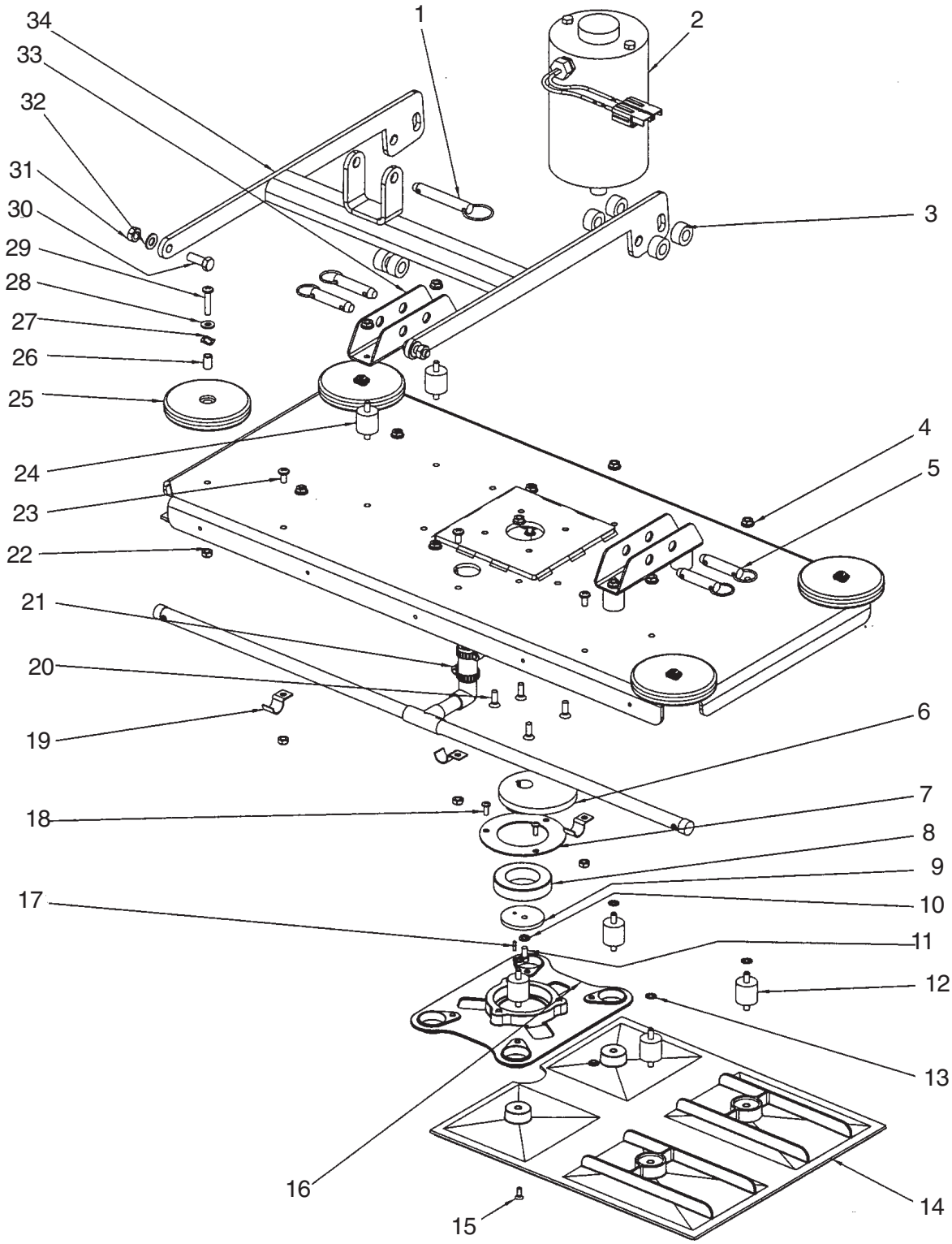




Clarke®
FOCUS Rider Scrubber
28" Cylindrical Head Assembly Parts List 3/05
Drawing #10962A

Ref	Part No.	Description	Qty
1	980638	Washer, 3/8 Lock	4
2	962244	Bolt, 3/8-16 x .75 Hex	4
3	30649A	Hose, Solution	1
4	50248A	Clamp, Hose	2
5	40772A	Motor, Brush	2
6	980646	Washer, 1/4" Flat	6
7	980657	Washer, Lock 1/4	9
8	85806A	Screw, 1.4-20 x 3/4 Hex	6
9	61738A	Mainframe, Weldment	1
10	52477A	Knob, 1.4-20 Clamp	2
11	80248A	Key, 3/16 Sq x .50 Lg	2
12	80247A	Key, 1/8 Sq x .75 Lg	2
13	61308A	Bearing Carrier	2
14	51226A	Bearing, Sealed	4
15	61318A	Pulley, Motor	2
16	30618A	Tray, 28" Cyl. Debris	1
17	61743A	Cover, Cyl Head Belt	2
18	84237A	Screw, 10-32 x .50 P.H.	6
19	61752A	Plate, Skirt L.H.	1
20	80240A	Screw, 10-32 x 3/8 F.H.	14
21	30312A	Skirt, Side	2
22	61336A	Spacer, Binding	4
23	962094	Screw, 10-32 x 3/8 R.H.	3
24	53661A	Belt, Drive	2
25	61319A	Pulley, Brush Drive	2
26	467308	Ring, Retainer	4
27	962098	Screw, 1/4-20 x 3/4 F.H.	6
28	61309A	Shaft, Drive	2
29	80270A	Screw, 1/4-20 Shoulder	2
30	81104A	Nut, 1/4" Nylock	8
31	30049B	Wheel, Squeegee 2"	6
32	80257A	Washer, Neoprene	4
33	61293A	Hub, Driver	2
34	980648	Washer, 17/32 x 1 1/16 Plain	2
35	980626	Washer, 1/2 Lock	2
36	170857	Nut, 1/2-13 Hex	2
37	60254A	Bolt, 5/16 x 2.25 Shoulder	2
38	61299A	Hub, Driven	2
39	51225A	Bearing, Sealed	2
40	167312	Ring, Retainer Internal	2
41	61310A	Shaft, Driven	2
42	962973	Screw, 3/8-16 x 3/4 Flat Hd.	2
43	61335A	Retainer, Skirt	2
44	61751A	Plate, Skirt R.H.	1
45	61742A	Door, Brush	1
46	962285	Screw, 1/4-20 x 1.00 F.H.	4
47	61322A	Plate, Brush Door	2
48	53182A	Cap, Plug	2
49	30648A	Tube, Solution Assembly	1
50	77091A	Label, Moving Parts	1

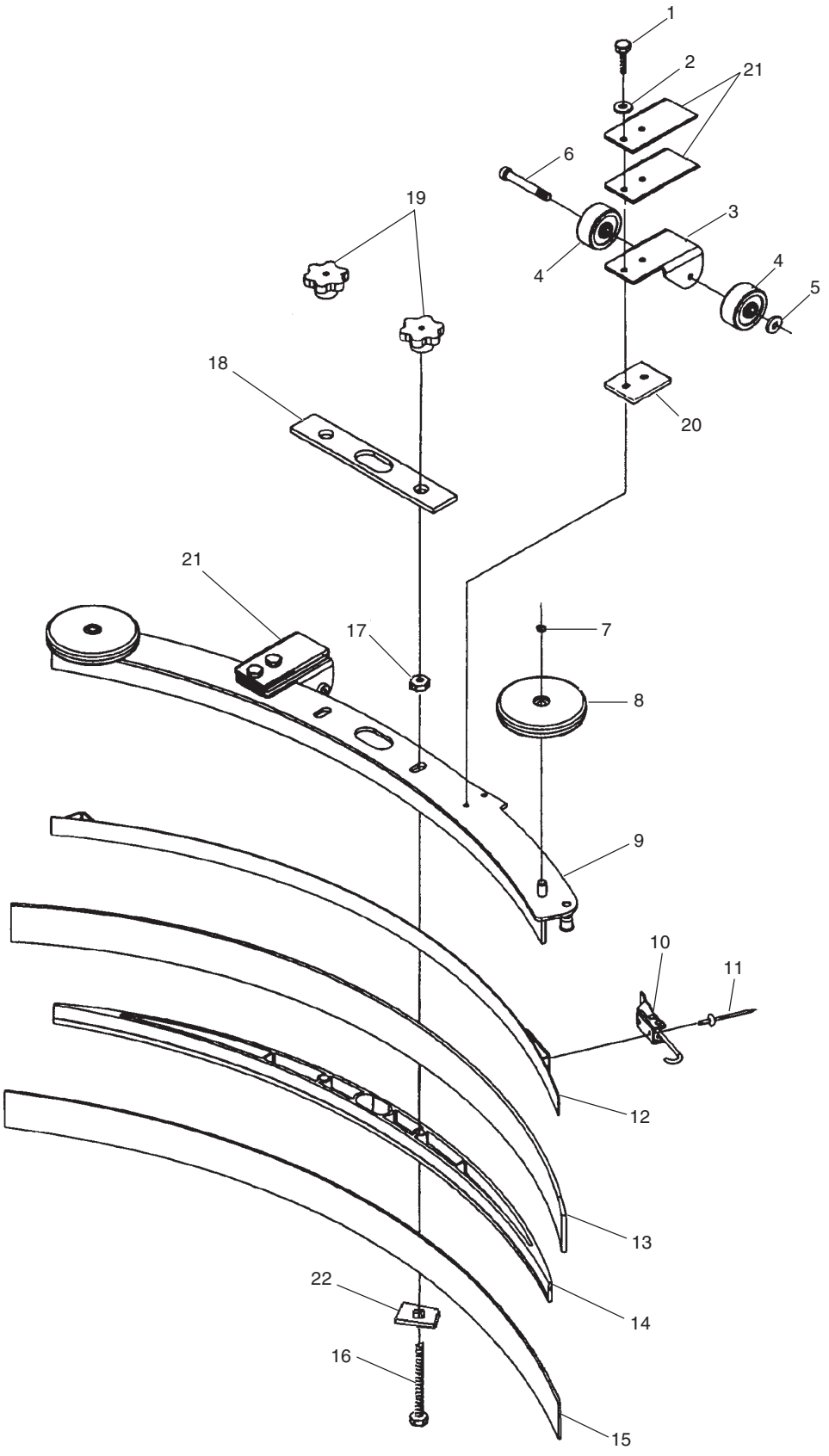
Clarke®
FOCUS Rider Scrubber
32" BOOST™ Head Assembly Drawing 8/06
Drawing #11103A



Clarke®
FOCUS Rider Scrubber
32" BOOST™ Head Assembly Parts List 8/06
Drawing #11103A

Ref	Part No.	Description	Qty
1	53493A	Pin, Quick Release Actuator	1
2	40790B	Motor, 24V DC	1
3	30735A	Spacer, Lift Arm	8
4	812204	Nut, Serrated Flange	12
5	53766A	Pin, Quick Release	4
6	61753A	Eccentric	1
7	61775A	Retainer, Bearing	1
8	50736A	Bearing	1
9	61724A	Retainer, Eccentric	1
10	980657	Washer, Lock ¼	1
11	85737A	Screw, ¼-20 x ½ HHCS	1
12	54753B	Spring, Rubber	8
13	980614	Washer, ¼" Starlock Ext.	8
14	30664A	Plate, Flex Asm. 32"	2
15	84236A	Screw, #10-32 x .50 FH	4
16	30663A	Plate, Driver	1
17	925589	Pin, Roll	1
18	84237A	Screw, 10-32 x .50 PH	3
19	782002	Clamp, Manifold	3
20	962098	Screw, ¼-20 x 3/4 FH	4
21	11002A	Tube, Assmebly Drip 32"	1
22	81217A	Nut, ¼-20 Hex ESNA	5
23	85395A	Screw, ¼-20 x ½" PH	3
24	53730A	Isolator, Deck	4
25	30048A	Wheel, Guide	4
26	61782A	Sleeve, Guide Wheel	4
27	980022	Washer, Wave	4
28	980646	Washer, ¼" Flat	4
29	85301A	Screw, ¼-20 x 1¼ CRPH	4
30	962288	Bolt, 3/8 - 16 x 1 Hex Hd.	2
31	81105A	Nut, 3/8-16 SS ESNA	2
32	87618A	Washer, Flat .39 ID x .75 x 0.62	2
33	61816A	Bracket. Lift	2
34	61818A	Arm, Lift Weldment	1

Clarke®
FOCUS Rider Scrubber
Squeegee Assembly Drawing 8/06

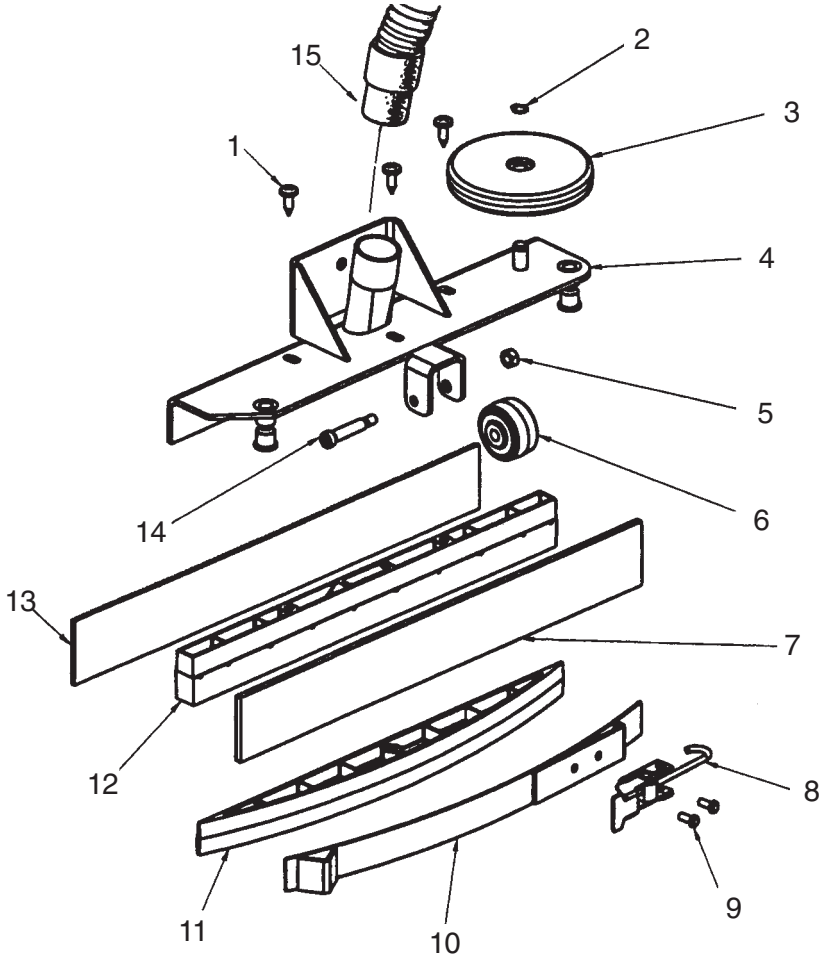


Clarke®
FOCUS Rider Scrubber
Squeegee Assembly Drawing 8/06
Drawing # 10802A

Ref. #	Part No.	Description	10068A 39" Qty	10129A 32" Qty	11041L 41" Qty
1	107915	Screw, ¼-20 x 1 Hex SS	-	4	-
	80253A	Screw, ¼-20 x 1½ Hex SS	4	-	4
2	980657	Washer, ¼ Lock	4	4	4
3	60243A	Bracket, Squeegee Wheel	2	2	2
4	30049B	Wheel, Squeegee	4	4	4
5	81104A	Nut, ¼-20	2	2	2
6	60254A	Bolt, Shoulder 5/16x 2¼	2	2	2
7	53185A	Ring, 3/8 ID Snap	2	2	2
8	30048A	Wheel, Guide, 4 Inch Diameter	2	2	2
9	60272B	Channel, Squeegee Weldment 39”	1	-	-
	60234B	Channel, Squeegee Weldment 32”	-	1	-
	61886A	Channel, Squeegee Weldment 41”	-	-	1
10	50835A	Latch, Squeegee Clamp	1	1	1
11	930086	Rivet, 3/16 x .450 Aluminum	2	2	2
12	60252A	Strap, Clamp, Squeegee Retainer 39”	1	-	-
	60232A	Strap, Clamp, Squeegee Retainer 32	-	1	-
	61885A	Strap, Clamp, Squeegee Retainer 41”	-	-	1
13	30557A	Blade, Rear, Gum Rubber, 39”	1	-	-
	30717L1	Blade, Rear, Linatex Notched, 39”	1	-	-
	30557L	Blade, Rear, Linatex	1	-	-
	30556A	Blade, Rear, Gum Rubber, 32”	-	1	-
	30556L	Blade, Rear, Linatex	-	1	-
	30774L	Blade, Outer, Linatex, BOOST 41”	-	-	1
14	30058A	Spacer, Squeegee 39”	1	-	-
	30047A	Spacer, Squeegee 32	-	1	-
	38726A	Spacer, Squeegee 41”	-	-	1
15	30091A	Blade, Front Ribbed 39”	1	-	-
	30066A	Blade, Front Ribbed 32”	-	1	-
	30764L1	Blade, Front Linatex Notched 32”	-	1	-
	30773L2	Blade, Inner Linatex Notched , BOOST 41”	-	-	1
16	80011A	Screw, 3/8-16 x 3	2	2	2
17	81301A	Nut, 3/8-16 Jam SS	2	2	2
18	34260B	Gasket	1	1	1
19	25201A	Knob	2	2	2
20	60358A	Shim, Squeegee Wheel	2	2	2
21	61370A	Weight	*	*	*
22	80280A	Nut, Squeegee Backup	2	2	2

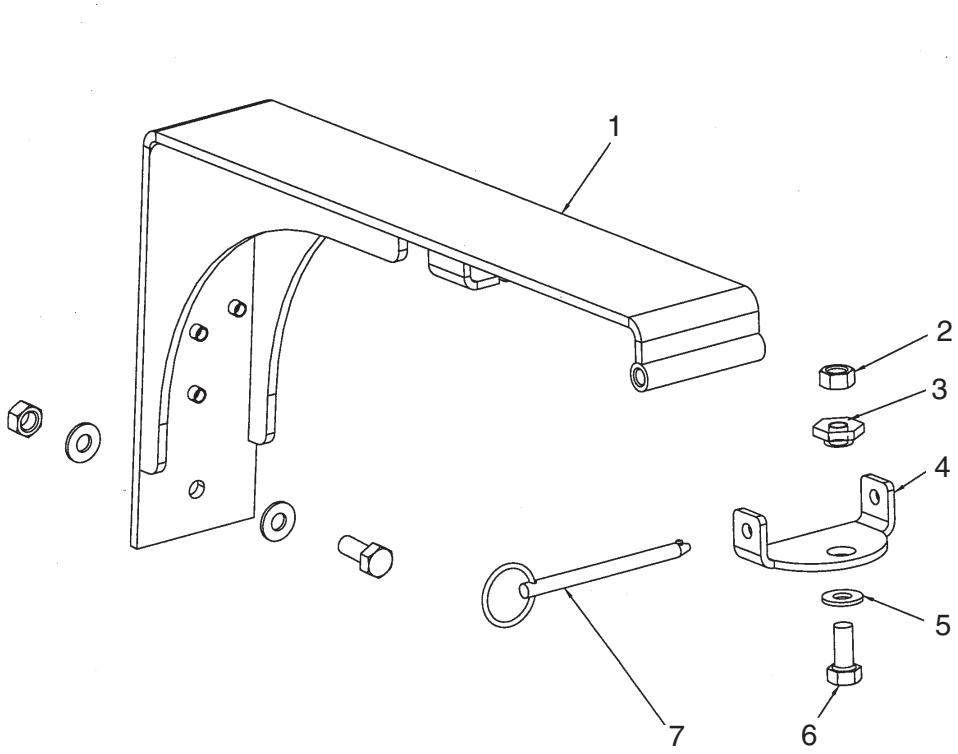
*** Optional - Not supplied with machine.**

Clarke®
FOCUS Rider Scrubber
Front Squeegee Assembly Drawing and Parts List 8/05
(Rotary Machines Only)
Drawing # 10694A



Ref	Part No.	Description	Qty
1	80275A	Screw, 1/4 - 14 x 3/4	3
2	53185A	Ring, Retainer	1
3	30048A	Wheel, Guide	1
4	61496A	Weldment, Fr. Squeegee Base	1
5	81104A	Nut, 1/4 Nylock	1
6	59932A	Wheel, Squeegee 1 5/8	1
7	30540A	Blade, Outer Gum Rubber	1
8	50835A	Latch, Squeegee Clamp	1
9	930086	Rivet, 3/16 x .450 Pan HD	2
10	61495A	Strap, Squeegee Weldment	1
11	53444A	Wedge, Secondary Squeegee	1
12	53443A	Spacer, Secondary Squeegee	1
13	30541A	Blade, Squeegee	1
14	80270A	Screw, 1/4 - 20 Shoulder	1
15	30569A	Hose, Sec. Squeegee	1

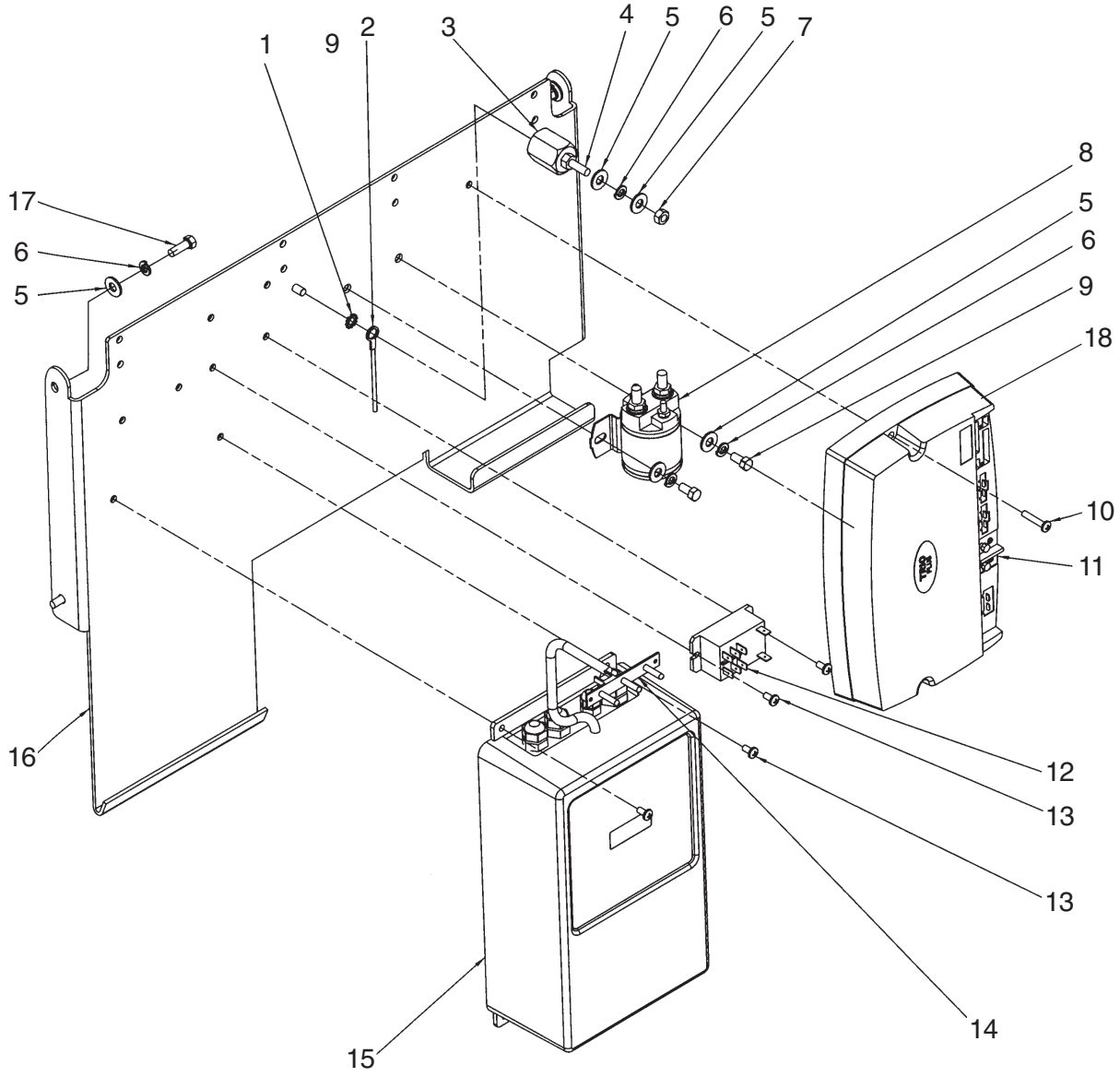
Clarke®
FOCUS Rider Scrubber
Front Squeegee Arm Assembly Drawing and Parts List 2/05
(Rotary Machine Only)
Drawing # 10696A



Ref	Part No.	Description	Qty
1	61548A	Arm, Weldment Squeegee	1
2	81112A	Nut, 5/16-18 Thin ESNA	2
3	67867A	Spacer, Squeegee Swivel	1
4	60256A	Arm, Squeegee Pivot	1
5	980651	Washer, 5/16 Flat	3
6	85811A	Screw, 5/16-18 x 3/4 Hex Head	2
7	53491A	Pin, Quick Release	1
NI	61370A	Weight	*

*** Optional - Not supplied with machine.**

Clarke®
FOCUS Rider Scrubber
Electrical Panel Assembly Drawing and Parts List 8/06
Drawing # 11091A, 107825, 109613, 109895

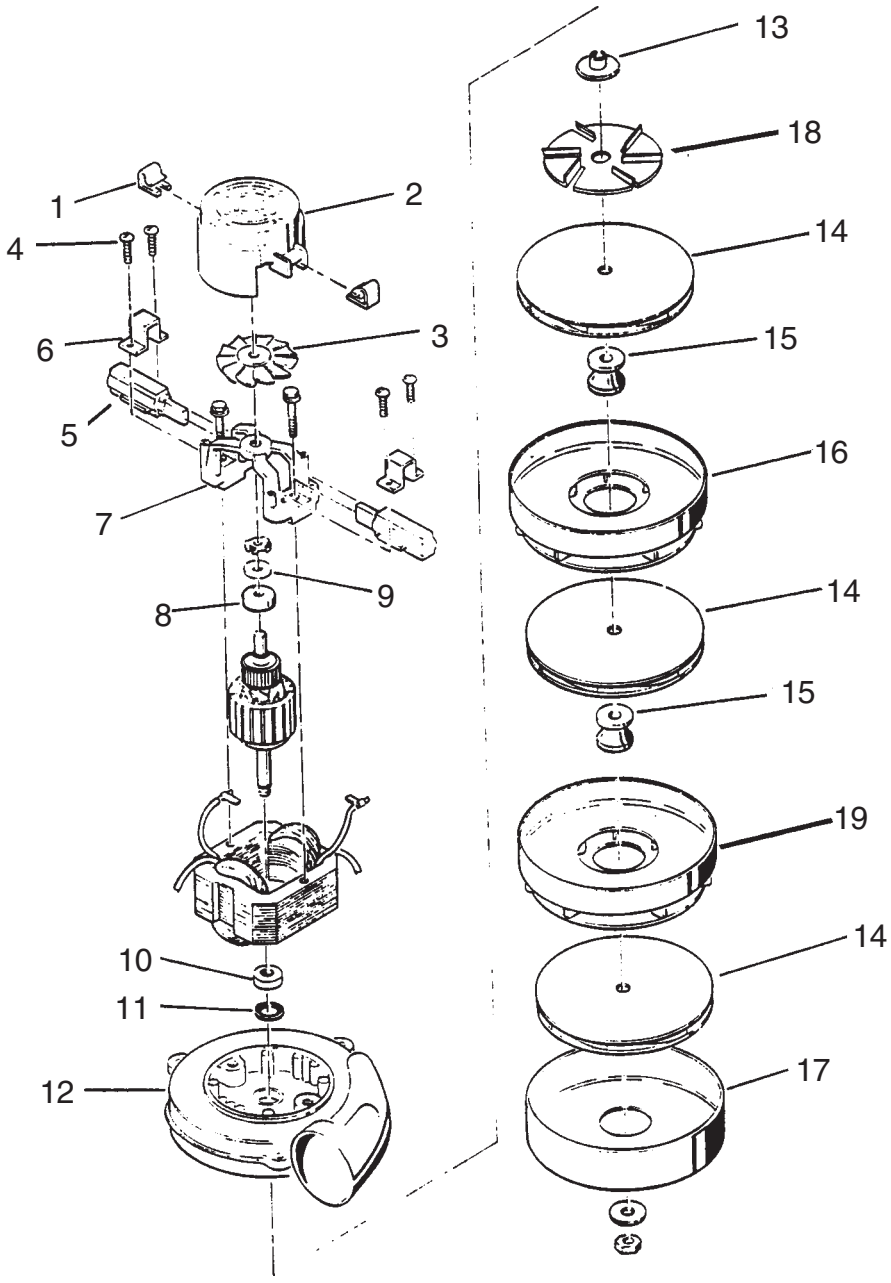


Ref	Part No.	Description	Qty
1	980614	Washer, 1/4" Starlock Ext.	1
2	40932A	Harness, Main Power	1
3	854849	Post, Isolation	1
4	83302A	Stud, 1/4-20	1
5	87026A	Washer, 1/4 Flat SS	8
6	980657	Washer, Lock 1/4	7
7	81104A	Nut, 1/4" Nylock	1
8	41801A	Contactor, Main 36V	1
9	962430	Screw, 1/4-20 x 1/2 HHCS	2
10	962113	Screw, 10-32 x 1.00 P.H.	1
11	53790A	Controller, 32" Main	1
12	40892A	Relay	1
13	962929	Screw, 10-32 x 3/8"	4
14	40853A	Display, Battery Charger	1
15	40728A	Charger, 36V Battery w/display	1

Ref	Part No.	Description	Qty
16	61558A	Plate, Electrical Panel	1
17	962086	Screw, 1/4-20 x 3/4 Hex Head	4
18	53791A	Main Controller, 28" Rotary	1
	53792A	Main Controller, 34" Rotary	1
	53790A	Main Controller, 32" BOOST	1
	53762A	Main Controller, 28" Cylindrical	1
NI	77092A	Label, Gases and Chemical	1
NI	70794A	Label, Battery Connection	1
NI	41217A	Cable, Battery Series	1
NI	40896A	Cable, 32" Neg. Battery	1
NI	40895A	Cable, 24" Pos. Battery	1
NI	40882A	Cable, 200 Amp Fus. Battery	1
NI	40934A	Harness, Logic	1

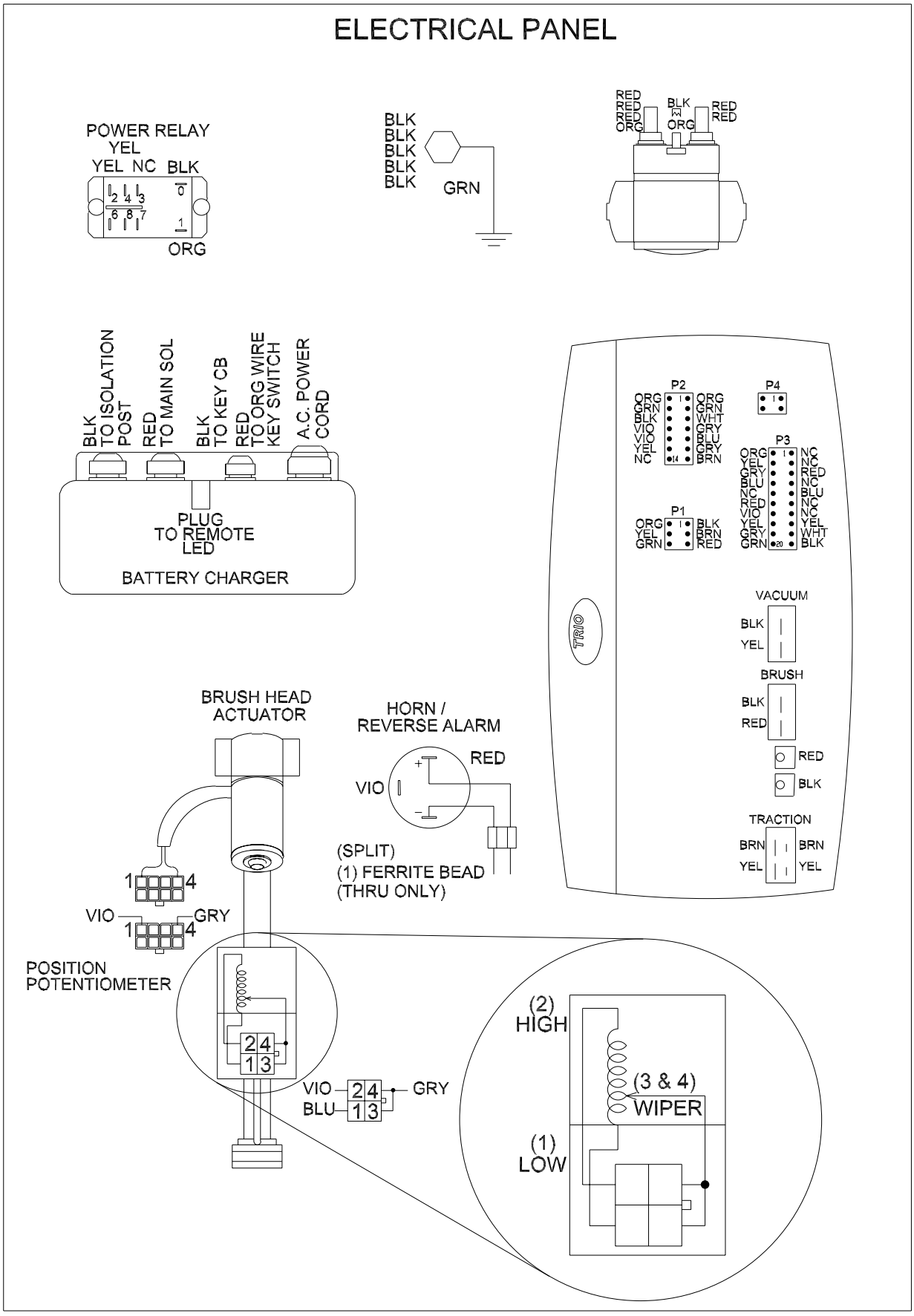
NI = Not illustrated

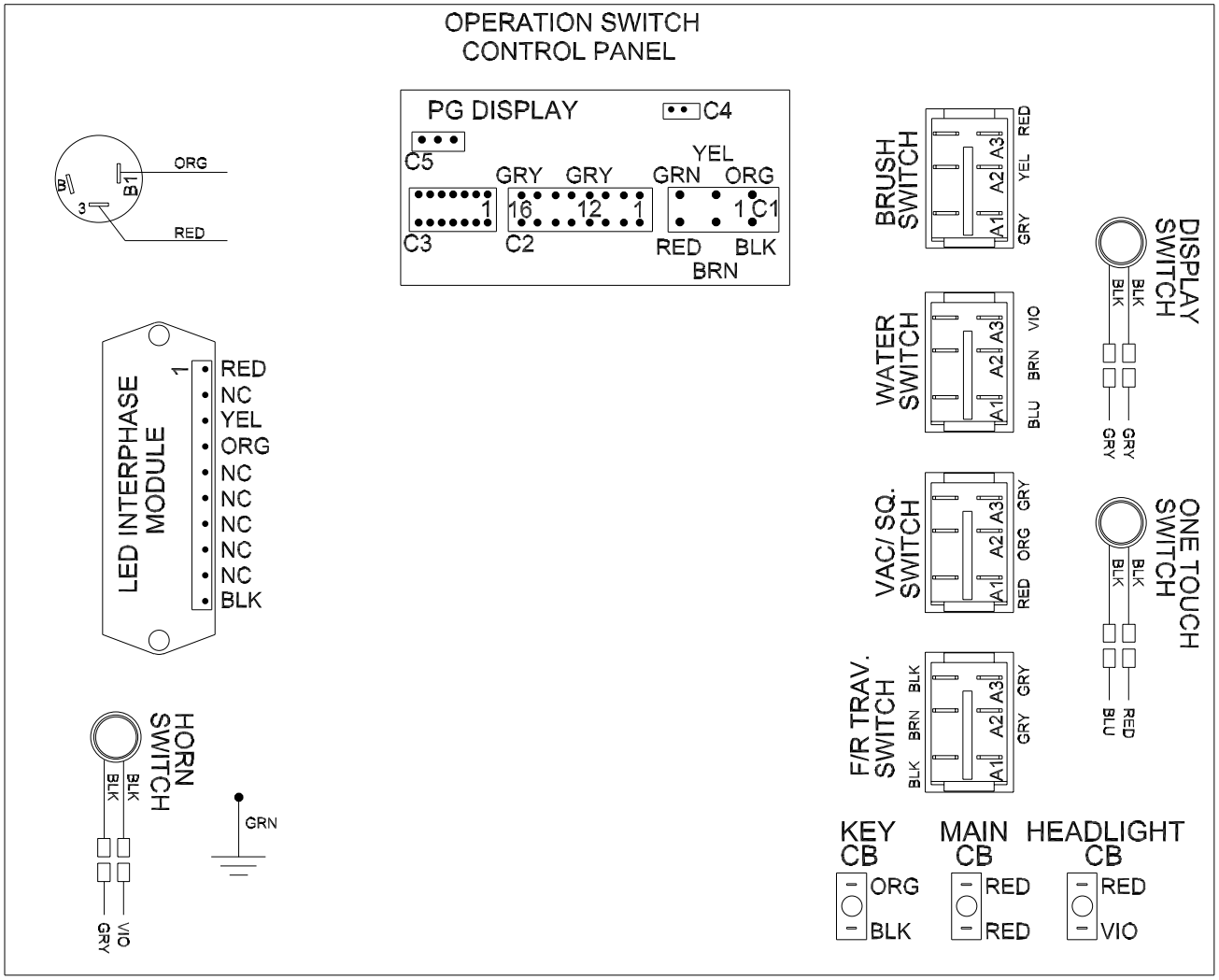
Clarke®
FOCUS Rider Scrubber
Vac Motor Assembly #45019A 6/04

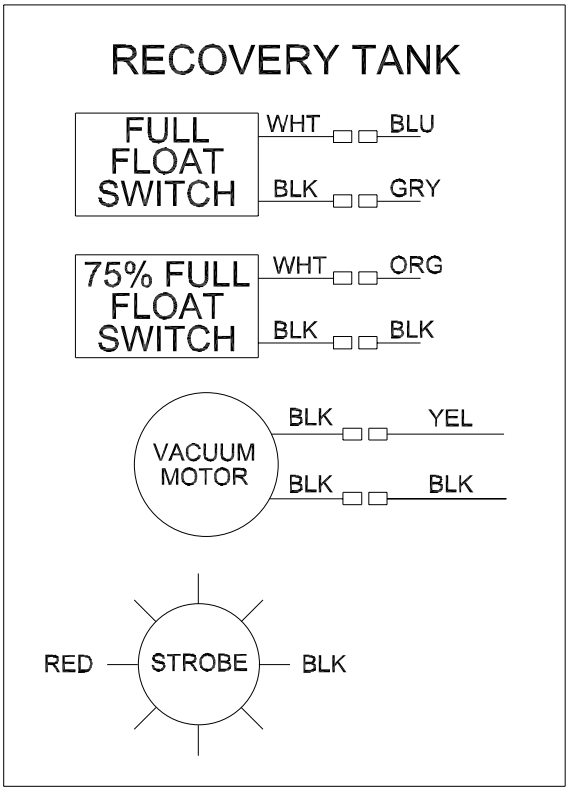


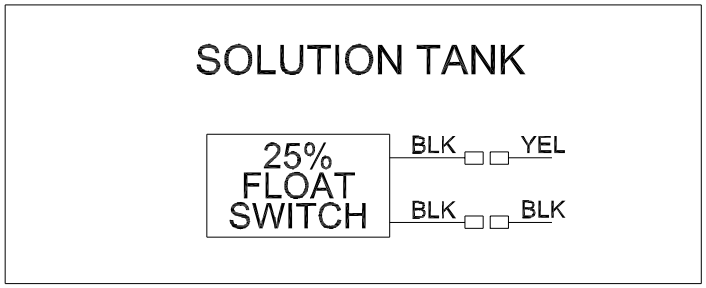
Ref #	Part No.	Description	Qty
1	51913A	Clip (optional)	2
2	54809A	Housing	1
3	53905A	Fan	1
4	85303A	Screw - 8-32 x 3/8	4
5	40830A	Carbon Brushes	2
6	51914A	Clamp	2
7	50618A	Bracket	1
8	53100A	Disc	1
9	902679	Bearing - Ball	1
10	902648	Bearing - ball, radial	1

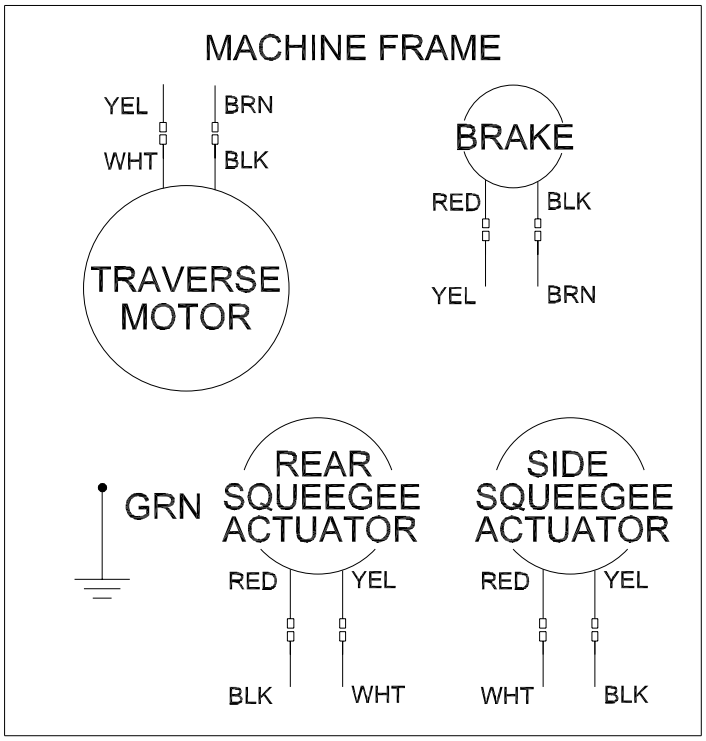
Ref #	Part No.	Description	Qty
11	59803A	Washer - neoprene	1
12	50610A	Bracket and shell	1
13	58501A	Spacer	1
14	53914A	Fan - Rotating	3
15	658201	Spacer	2
16	53908A	Fan - Stationary	1
17	658506	Shell	1
18	53995A	Fan, Air Seal	1
19	53996A	Fan, Stationary	1

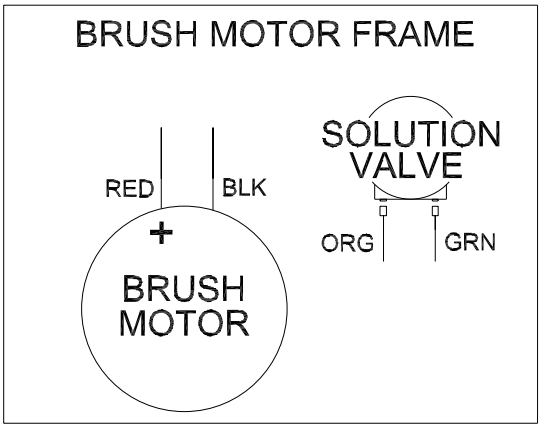

ELECTRICAL PANEL
POWER RELAY
YEL
YEL NC BLK
ORG
BLK
BLK
BLK
BLK
BLK
GRN
RED
RED
RED
ORG
BLK
ORG
RED
RED
BLK TO ISOLATION POST
RED TO MAIN SOL
BLK TO KEY CB
RED TO ORG WIRE KEY SWITCH
A.C. POWER CORD
PLUG TO REMOTE LED
BATTERY CHARGER
P2
P4
P3
P1
TRIO
VACUUM
BLK
YEL
BRUSH
BLK
RED
RED
BLK
TRACTION
BRN
YEL
BRN
YEL
BRUSH HEAD ACTUATOR
HORN / REVERSE ALARM
RED
VIO
(SPLIT)
(1) FERRITE BEAD
(THRU ONLY)
VIO
GRY
POSITION POTENTIOMETER
VIO
BLU
GRY
(2) HIGH
(3 & 4) WIPER
(1) LOW

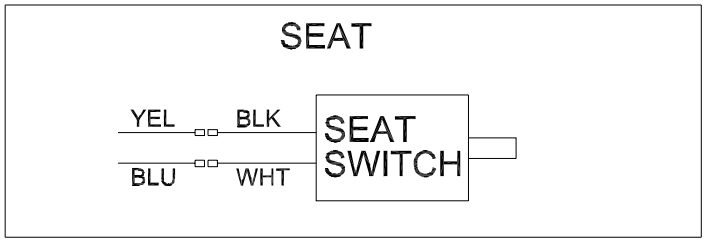

OPERATION SWITCH
CONTROL PANEL
PG DISPLAY
C4
C5
C3
C2
C1
YEL
GRY GRY
GRN ORG
RED BLK
BRN
ORG
RED
LED INTERPHASE
MODULE
RED
NC
YEL
ORG
NC
NC
NC
NC
NC
BLK
HORN
SWITCH
GRN
BRUSH
SWITCH
WATER
SWITCH
VAC/ SQ.
SWITCH
F/R TRAV.
SWITCH
DISPLAY
SWITCH
ONE TOUCH
SWITCH
KEY
CB
MAIN
CB
HEADLIGHT
CB
ORG
BLK
RED
RED
RED
VIO

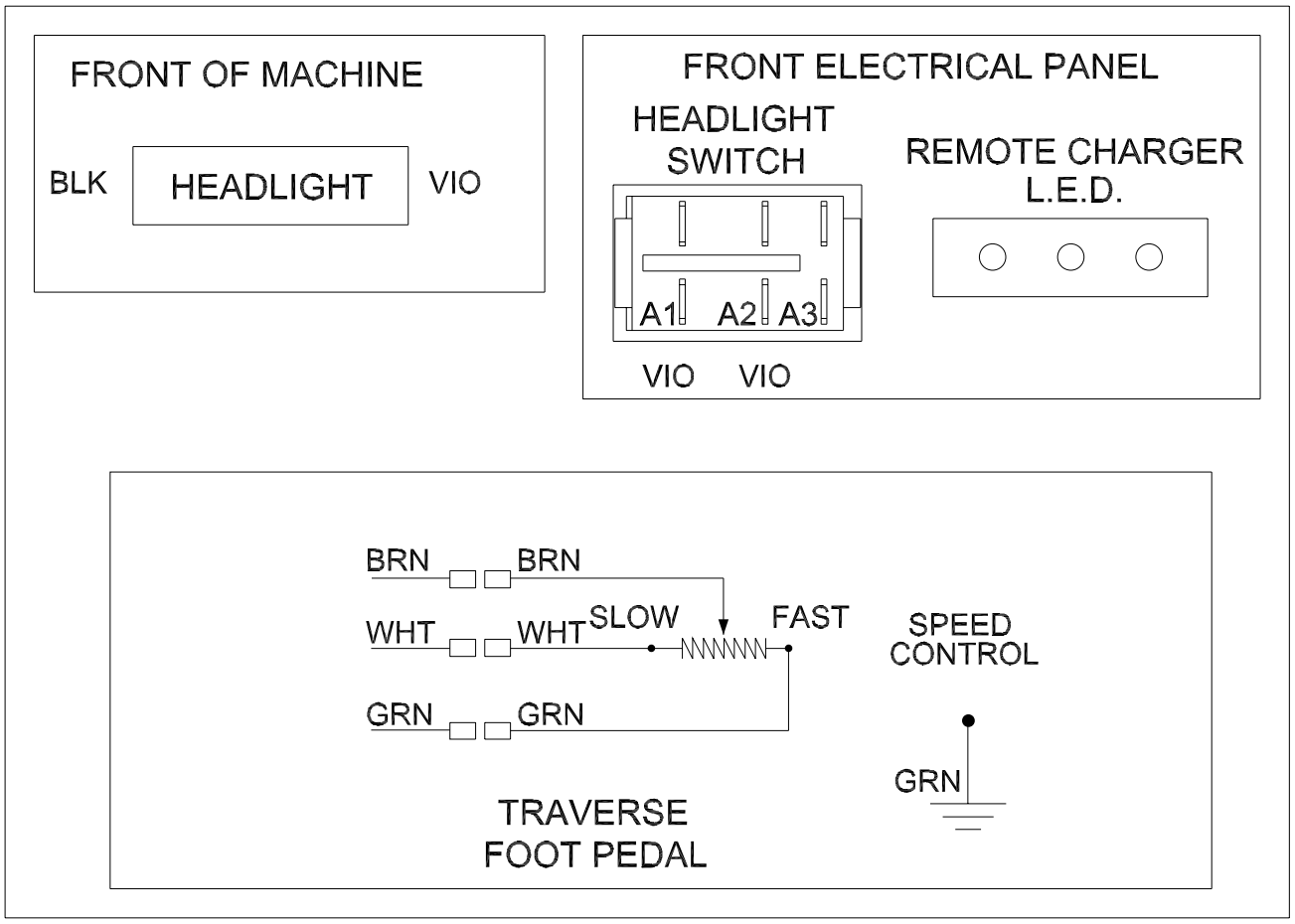

RECOVERY TANK
FULL FLOAT SWITCH
WHT
BLU
BLK
GRY
75% FULL FLOAT SWITCH
WHT
ORG
BLK
BLK
VACUUM MOTOR
BLK
YEL
BLK
BLK
RED
STROBE
BLK

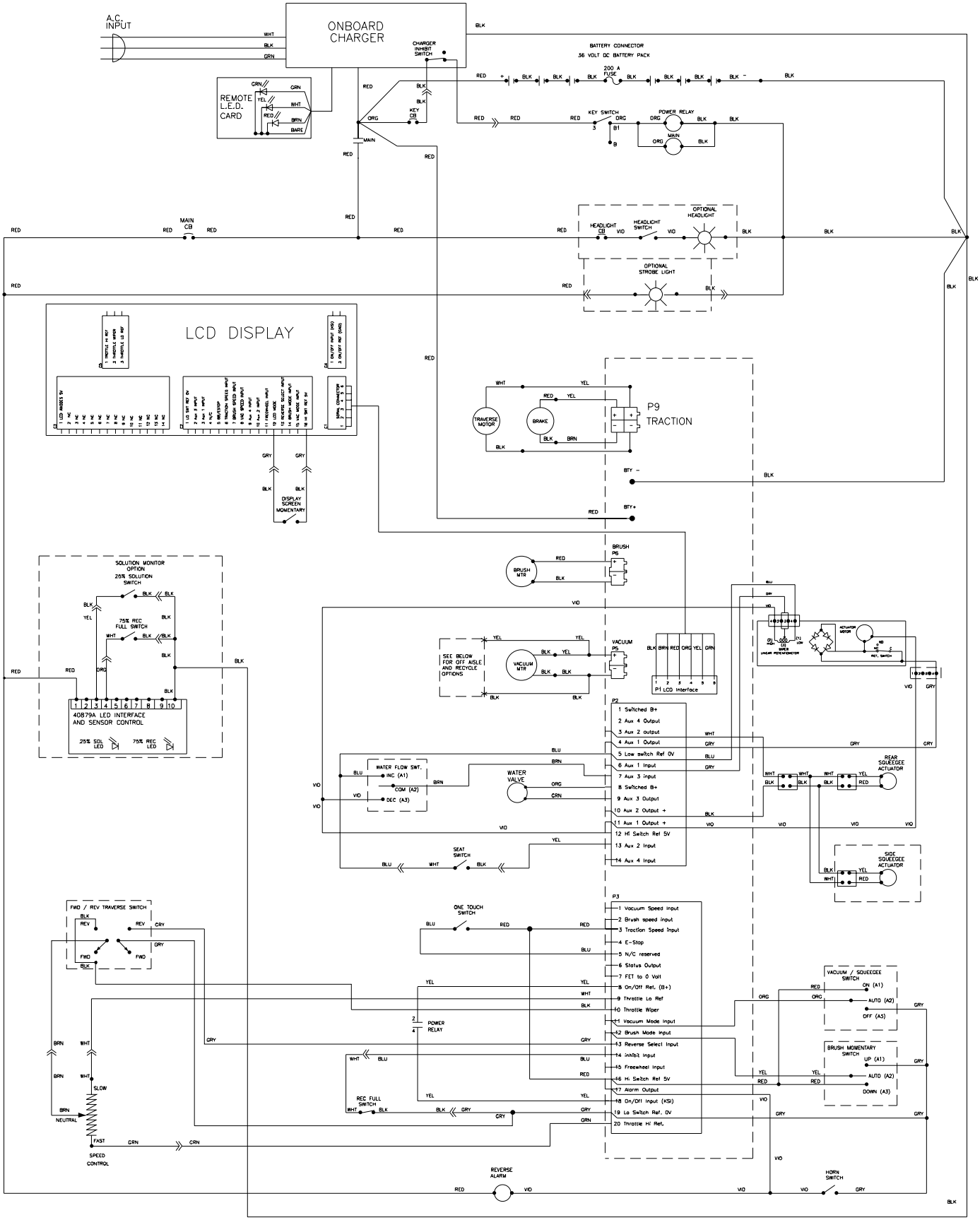

SOLUTION TANK
25% FLOAT SWITCH
BLK
YEL
BLK
BLK

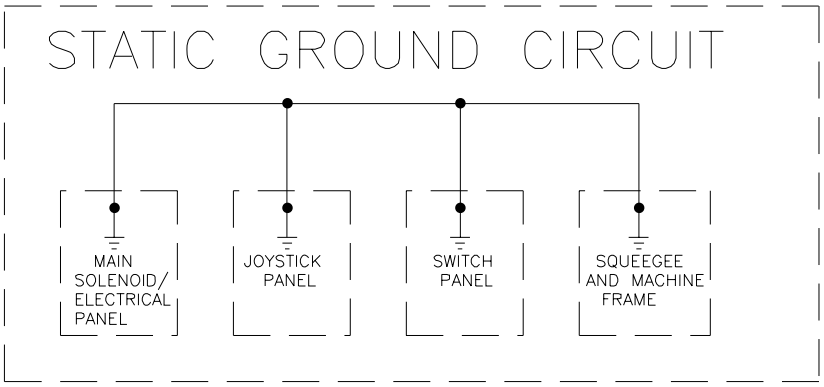

MACHINE FRAME
YEL
BRN
WHT
BLK
TRAVERSE MOTOR
BRAKE
RED
BLK
YEL
BRN
GRN
REAR SQUEEGEE ACTUATOR
RED
YEL
BLK
WHT
SIDE SQUEEGEE ACTUATOR
RED
YEL
WHT
BLK

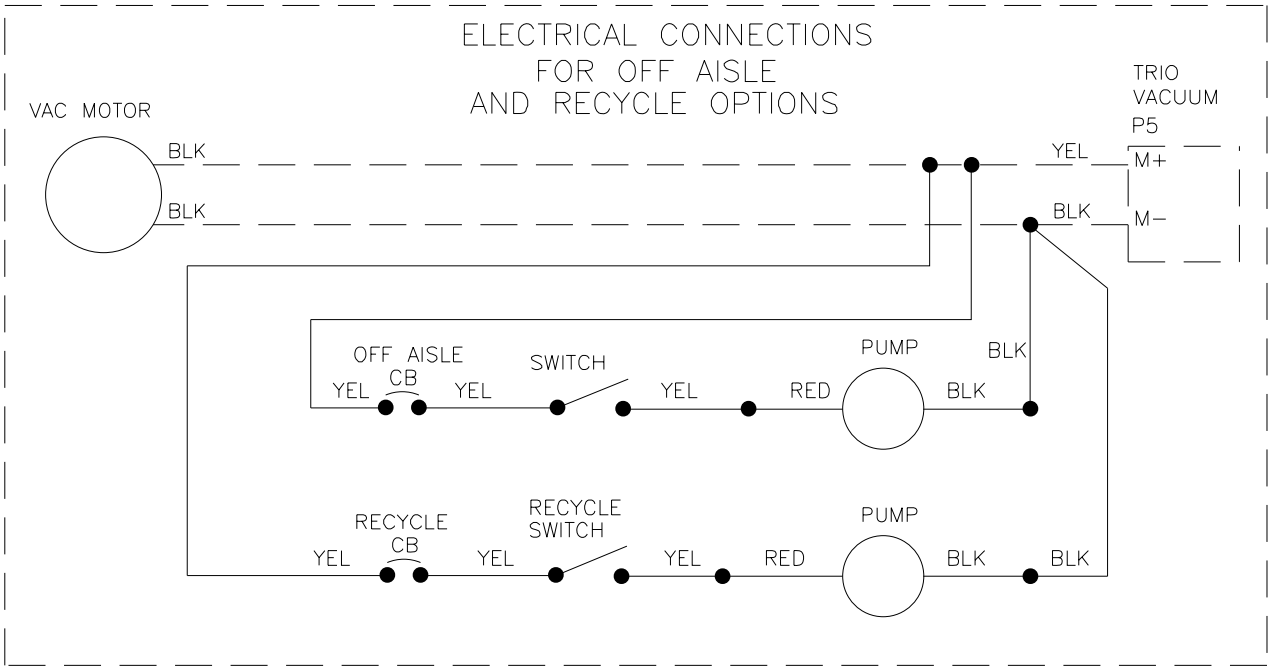

BRUSH MOTOR FRAME
RED
BLK
+
BRUSH MOTOR
SOLUTION VALVE
ORG
GRN


SEAT
YEL
BLK
BLU
WHT
SEAT SWITCH


FRONT OF MACHINE
BLK
HEADLIGHT
VIO
FRONT ELECTRICAL PANEL
HEADLIGHT SWITCH
A1
A2
A3
VIO
VIO
REMOTE CHARGER L.E.D.
BRN
BRN
WHT
WHT
SLOW
FAST
GRN
GRN
SPEED CONTROL
GRN
TRAVERSE FOOT PEDAL


A.C. INPUT
ONBOARD CHARGER
CHARGER INHIBIT SWITCH
BATTERY CONNECTOR
36 VOLT DC BATTERY PACK
200 A FUSE
REMOTE L.E.D. CARD
KEY SWITCH
POWER RELAY
MAIN CB
HEADLIGHT CB
HEADLIGHT SWITCH
OPTIONAL HEADLIGHT
OPTIONAL STROBE LIGHT
LCD DISPLAY
DISPLAY SCREEN MOMENTARY
P9 TRACTION
TRAVERSE MOTOR
BRAKE
BTY -
BTY+
BRUSH P6
BRUSH MTR
SOLUTION MONITOR OPTION
25% SOLUTION SWITCH
75% REC FULL SWITCH
40879A LED INTERFACE AND SENSOR CONTROL
25% SOL LED
75% REC LED
VACUUM P5
VACUUM MTR
SEE BELOW FOR OFF AISLE AND RECYCLE OPTIONS
P1 LCD Interface
P2
1 Switched B+
2 Aux 4 Output
3 Aux 2 output
4 Aux 1 Output
5 Low switch Ref 0V
6 Aux 1 Input
7 Aux 3 input
8 Switched B+
9 Aux 3 Output
10 Aux 2 Output +
11 Aux 1 Output +
12 Hi Switch Ref 5V
13 Aux 2 Input
14 Aux 4 Input
WATER FLOW SWT.
INC (A1)
COM (A2)
DEC (A3)
WATER VALVE
REAR SQUEEGEE ACTUATOR
SIDE SQUEEGEE ACTUATOR
SEAT SWITCH
FWD / REV TRAVERSE SWITCH
ONE TOUCH SWITCH
P3
1 Vacuum Speed Input
2 Brush speed input
3 Traction Speed Input
4 E-Stop
5 N/C reserved
6 Status Output
7 FET to 0 Volt
8 On/Off Ref. (B+)
9 Throttle Lo Ref
10 Throttle Wiper
11 Vacuum Mode Input
12 Brush Mode Input
13 Reverse Select Input
14 InhBit Input
15 Freewheel Input
16 Hi Switch Ref 5V
17 Alarm Output
18 On/Off Input (KSI)
19 Lo Switch Ref. 0V
20 Throttle Hi Ref.
POWER RELAY
REC FULL SWITCH
SLOW
NEUTRAL
FAST
SPEED CONTROL
VACUUM / SQUEEGEE SWITCH
ON (A1)
AUTO (A2)
OFF (A3)
BRUSH MOMENTARY SWITCH
UP (A1)
AUTO (A2)
DOWN (A3)
REVERSE ALARM
HORN SWITCH


STATIC GROUND CIRCUIT
MAIN SOLENOID/ ELECTRICAL PANEL
JOYSTICK PANEL
SWITCH PANEL
SQUEEGEE AND MACHINE FRAME


ELECTRICAL CONNECTIONS
FOR OFF AISLE
AND RECYCLE OPTIONS
VAC MOTOR
BLK
BLK
TRIO VACUUM
P5
YEL
M+
BLK
M–
OFF AISLE CB
YEL
YEL
SWITCH
YEL
RED
PUMP
BLK
BLK
RECYCLE CB
YEL
YEL
RECYCLE SWITCH
YEL
RED
PUMP
BLK
BLK